

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|-------------------|----------------|
| GeneID | Symbol | Description | log2(fold change) | -log10(Pvalue) |
| 100996442 | LOC100996442 | WAS protein family homolog 2-like | 0.993 | 2.908 |
| 729737 | LOC729737 | uncharacterized LOC729737 | 1.601 | 5.631 |
| 102723897 | WASH9P | WAS protein family homolog 9, pseudogene | 0.681 | 1.581 |
| 112268260 | LOC112268260 | uncharacterized LOC112268260 | 1.515 | 1.467 |
| 100132287 | LOC100132287 | uncharacterized LOC100132287 | 1.423 | 5.806 |
| 81399 | OR4F16 | olfactory receptor family 4 subfamily F member 16 | 2.522 | 1.974 |
| 100133331 | LOC100133331 | replaced by ID 100288069 | 1.366 | 5.437 |
| 107984841 | LOC107984841 | replaced by ID 100288069 | 0.795 | 2.432 |
| 107984847 | LOC107984847 | replaced by ID 100288069 | 0.998 | 2.083 |
| 107984849 | LOC107984849 | replaced by ID 100288069 | 1.329 | 4.374 |
| 100288069 | LOC100288069 | uncharacterized LOC100288069 | 1.096 | 3.834 |
| 26155 | NOC2L | NOC2 like nucleolar associated transcriptional repressor | -0.654 | 3.636 |
| 339451 | KLHL17 | kelch like family member 17 | -0.732 | 1.502 |
| 84069 | PLEKHN1 | pleckstrin homology domain containing N1 | -2.582 | 3.415 |
| 57801 | HES4 | hes family bHLH transcription factor 4 | -3.417 | 5.406 |
| 9636 | ISG15 | ISG15 ubiquitin like modifier | -3.761 | 2.639 |
| 375790 | AGRN | agrin | -4.395 | 9.911 |
| 54991 | C1orf159 | chromosome 1 open reading frame 159 | -0.913 | 1.89 |
| 126792 | B3GALT6 | beta-1,3-galactosyltransferase 6 | -1.205 | 4.951 |
| 80772 | CPTP | ceramide-1-phosphate transfer protein | 0.669 | 2.432 |
| 83756 | TAS1R3 | taste 1 receptor member 3 | 1.323 | 1.821 |
| 1855 | DVL1 | dishevelled segment polarity protein 1 | -0.618 | 1.412 |
| 55052 | MRPL20 | mitochondrial ribosomal protein L20 | -0.436 | 2.204 |
| 105378586 | LOC105378586 | uncharacterized LOC105378586 | 0.982 | 1.343 |
| 984 | CDK11B | cyclin dependent kinase 11B | 0.512 | 1.384 |
| 728642 | CDK11A | cyclin dependent kinase 11A | 0.623 | 1.697 |
| 5590 | PRKCZ | protein kinase C zeta | 0.818 | 1.351 |
| 5192 | PEX10 | peroxisomal biogenesis factor 10 | -0.545 | 1.339 |
| 9651 | PLCH2 | phospholipase C eta 2 | -1.911 | 3.569 |
| 55229 | PANK4 | pantothenate kinase 4 (inactive) | -0.635 | 1.936 |
| 115110 | TNFRSF14-AS1 | TNFRSF14 antisense RNA 1 | 0.642 | 2.03 |
| 8764 | TNFRSF14 | TNF receptor superfamily member 14 | -0.707 | 2.147 |
| 127281 | PRXL2B | peroxiredoxin like 2B | -1.191 | 3.65 |
| 100287898 | TTC34 | tetratricopeptide repeat domain 34 | -1.022 | 1.302 |
| 1953 | MEGF6 | multiple EGF like domains 6 | 1.936 | 4.644 |
| 105378607 | LOC105378607 | | 2.736 | 1.473 |
| 127262 | TPRG1L | tumor protein p63 regulated 1 like | 1.039 | 4.876 |
| 49856 | WRAP73 | WD repeat containing, antisense to TP73 | 1.292 | 7.337 |
| 7161 | TP73 | tumor protein p73 | 2.57 | 3.156 |
| 105378610 | TP73-AS3 | TP73 antisense RNA 3 | 3.141 | 2.158 |
| 105378609 | LOC105378609 | | 4.147 | 4.861 |
| 57212 | TP73-AS1 | TP73 antisense RNA 1 | -1.182 | 5.607 |
| 1677 | DFFB | DNA fragmentation factor subunit beta | -0.854 | 3.963 |
| 339448 | C1orf174 | chromosome 1 open reading frame 174 | -0.571 | 2.454 |
| 388591 | RNF207 | ring finger protein 207 | -4.456 | 8.598 |
| 387509 | GPR153 | G protein-coupled receptor 153 | -3.941 | 7.22 |
| 8718 | TNFRSF25 | TNF receptor superfamily member 25 | -4.06 | 3.829 |
| 9903 | KLHL21 | kelch like family member 21 | 0.94 | 1.532 |
| 148479 | PHF13 | PHD finger protein 13 | 1.327 | 5.591 |
| 55735 | DNAJC11 | DnaJ heat shock protein family (Hsp40) member C11 | -1.117 | 5.152 |
| 9341 | VAMP3 | vesicle associated membrane protein 3 | 0.54 | 3.28 |
| 8863 | PER3 | period circadian regulator 3 | -1.228 | 1.987 |
| 3604 | TNFRSF9 | TNF receptor superfamily member 9 | 1.22 | 1.713 |
| 54206 | ERRFI1 | ERBB receptor feedback inhibitor 1 | -1.676 | 1.522 |
| 2023 | ENO1 | enolase 1 | 0.692 | 2.538 |
| 80045 | GPR157 | G protein-coupled receptor 157 | 2.131 | 4.812 |
| 9563 | H6PD | hexose-6-phosphate dehydrogenase/glucose 1-dehydrogenase | 1.214 | 6.661 |
| 644997 | PIK3CD-AS1 | PIK3CD antisense RNA 1 | 1.233 | 3.08 |
| 22883 | CLSTN1 | calsyntenin 1 | -1.336 | 8.95 |
| 23095 | KIF1B | kinesin family member 1B | 1.636 | 9.53 |
| 105376725 | LOC105376725 | | 1.784 | 4.223 |
| 5226 | PGD | phosphogluconate dehydrogenase | 1.904 | 24.244 |
| 100526739 | CENPS-CORT | CENPS-CORT readthrough | 1.544 | 1.748 |
| 378708 | CENPS | centromere protein S | 1.581 | 1.701 |
| 1676 | DFFA | DNA fragmentation factor subunit alpha | -0.962 | 6.671 |
| 54897 | CASZ1 | castor zinc finger 1 | 1.016 | 2.177 |
| 148345 | C1orf127 | chromosome 1 open reading frame 127 | -2.903 | 1.555 |
| 23435 | TARDBP | TAR DNA binding protein | 0.63 | 1.635 |
| 10747 | MASP2 | MBL associated serine protease 2 | 0.668 | 1.366 |
| 6723 | SRM | spermidine synthase | -1.482 | 7.564 |
| 2475 | MTOR | mechanistic target of rapamycin kinase | -0.315 | 1.553 |
| 93611 | FBXO44 | F-box protein 44 | -1.369 | 2.253 |
| 57085 | AGTRAP | angiotensin II receptor associated protein | 0.515 | 1.756 |
| 284498 | C1orf167 | chromosome 1 open reading frame 167 | -0.793 | 1.546 |
| 4524 | MTHFR | methylenetetrahydrofolate reductase | -0.688 | 1.456 |
| 1185 | CLCN6 | chloride voltage-gated channel 6 | -0.793 | 2.445 |
| 9927 | MFN2 | mitofusin 2 | 0.635 | 1.935 |
| 60672 | MIIP | migration and invasion inhibitory protein | 0.868 | 2.413 |
| 943 | TNFRSF8 | TNF receptor superfamily member 8 | -2.541 | 7.922 |
| 7133 | TNFRSF1B | TNF receptor superfamily member 1B | -1.943 | 7.121 |
| 55187 | VPS13D | vacuolar protein sorting 13 homolog D | -0.555 | 2.357 |
| 9249 | DHRS3 | dehydrogenase/reductase 3 | -2.399 | 2.925 |
| 7799 | PRDM2 | PR/SET domain 2 | 1.047 | 4.776 |
| 23254 | KAZN | kazrin, periplakin interacting protein | 3.908 | 16.312 |
| 55092 | TMEM51 | transmembrane protein 51 | -3.008 | 10.523 |
| 114827 | FHAD1 | forkhead associated phosphopeptide binding domain 1 | -1.953 | 1.739 |
| 84301 | DDI2 | DNA damage inducible 1 homolog 2 | -1.073 | 6.175 |
| 6248 | RSC1A1 | regulator of solute carriers 1 | -0.946 | 2.621 |
| 729614 | SPEN-AS1 | SPEN antisense RNA 1 | 0.52 | 1.679 |
| 23013 | SPEN | spen family transcriptional repressor | -0.545 | 2.07 |
| 54455 | FBXO42 | F-box protein 42 | -0.536 | 1.574 |
| 55707 | NECAP2 | NECAP endocytosis associated 2 | -1.521 | 10.823 |
| 107984921 | LINC01772 | long intergenic non-protein coding RNA 1772 | -1.425 | 1.627 |
| 114819 | CROCCP3 | CROCC pseudogene 3 | -1.418 | 2.494 |
| 105376794 | LOC105376794 | CROCC pseudogene 2 | 1.058 | 2.308 |
| 84809 | CROCCP2 | uncharacterized LOC105376805 | 0.775 | 1.501 |
| 105376805 | LOC105376805 | ciliary rootlet coiled-coil, rootletin | -1.712 | 1.991 |
| 9696 | CROCC | peptidyl arginine deiminase 2 | -1.74 | 3.879 |
| 11240 | PADI2 | peptidyl arginine deiminase 4 | 2.086 | 6.305 |
| 23569 | PADI4 | peptidyl arginine deiminase 4 | 3.3 | 13.13 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 55920 | RCC2 | regulator of chromosome condensation 2 | -0.518 | 1.896 |
| 55160 | ARHGEF10L | Rho guanine nucleotide exchange factor 10 like | -4.187 | 16.47 |
| 8659 | ALDH4A1 | aldehyde dehydrogenase 4 family member A1 | 1.435 | 7.917 |
| 126917 | IFFO2 | intermediate filament family orphan 2 | -1.504 | 2.037 |
| 23065 | EMC1 | ER membrane protein complex subunit 1 | -0.613 | 1.635 |
| 51154 | MRT04 | MRT4 homolog, ribosome maturation factor | -1.076 | 3.637 |
| 832 | CAPZB | capping actin protein of muscle Z-line subunit beta | 0.335 | 2.203 |
| 255104 | TMC04 | transmembrane and coiled-coil domains 4 | -0.559 | 1.79 |
| 978 | CDA | cytidine deaminase | 2.428 | 11.254 |
| 65018 | PINK1 | PTEN induced kinase 1 | 0.834 | 1.906 |
| 100861548 | PINK1-AS | PINK1 antisense RNA | 0.58 | 1.592 |
| 112268222 | LOC112268222 | | 0.789 | 2.972 |
| 50809 | HP1BP3 | heterochromatin protein 1 binding protein 3 | 0.649 | 2.091 |
| 8672 | EIF4G3 | eukaryotic translation initiation factor 4 gamma 3 | 1.27 | 12.74 |
| 105376829 | LOC105376829 | uncharacterized LOC105376829 | 1.299 | 2.176 |
| 249 | ALPL | alkaline phosphatase, biomineralization associated | 5.158 | 9.133 |
| 105376834 | LINC02596 | long intergenic non-protein coding RNA 2596 | 5.073 | 3.377 |
| 401944 | LDLRAD2 | low density lipoprotein receptor class A domain containing 2 | -2.787 | 2.358 |
| 998 | CDC42 | cell division cycle 42 | 0.492 | 2.118 |
| 2048 | EPHB2 | EPH receptor B2 | -4.199 | 11.342 |
| 23028 | KDM1A | lysine demethylase 1A | -0.83 | 3.963 |
| 7798 | LUZP1 | leucine zipper protein 1 | -0.555 | 1.331 |
| 10236 | HNRNPR | heterogeneous nuclear ribonucleoprotein R | -0.628 | 1.881 |
| 6920 | TCEA3 | transcription elongation factor A3 | -5.359 | 5.807 |
| 55616 | ASAP3 | ArfGAP with SH3 domain, ankyrin repeat and PH domain 3 | -2.288 | 2.138 |
| 1870 | E2F2 | E2F transcription factor 2 | 2.241 | 4.462 |
| 101928163 | LOC101928163 | uncharacterized LOC101928163 | 2.506 | 4.214 |
| 6135 | RPL11 | ribosomal protein L11 | -0.78 | 3.212 |
| 11313 | LYPLA2 | lysophospholipase 2 | 0.322 | 1.739 |
| 2517 | FUCA1 | alpha-L-fucosidase 1 | -1.633 | 3.676 |
| 1269 | CNR2 | cannabinoid receptor 2 | -2.676 | 4.092 |
| 10772 | SRSF10 | serine and arginine rich splicing factor 10 | 0.83 | 1.862 |
| 90529 | STPG1 | sperm tail PG-rich repeat containing 1 | 1.909 | 2.925 |
| 11123 | RCAN3 | RCAN family member 3 | -1.183 | 1.863 |
| 25932 | CLIC4 | chloride intracellular channel 4 | -0.954 | 2.649 |
| 864 | RUNX3 | RUNX family transcription factor 3 | -1.345 | 8.662 |
| 107984932 | LOC107984932 | | -2.054 | 4.064 |
| 105376878 | RUNX3-AS1 | RUNX3 antisense RNA 1 | -2.319 | 6.755 |
| 57035 | RSRP1 | arginine and serine rich protein 1 | 0.945 | 4.291 |
| 6006 | RHCE | Rh blood group CcEe antigens | -0.399 | 1.515 |
| 57134 | MAN1C1 | mannosidase alpha class 1C member 1 | -3.164 | 14.517 |
| 57190 | SELENON | selenoprotein N | -0.953 | 4.813 |
| 79000 | AUNIP | aurora kinase A and ninein interacting protein | 0.906 | 3.335 |
| 3925 | STMN1 | stathmin 1 | 2.753 | 4.399 |
| 100500808 | MIR3917 | microRNA 3917 | 2.566 | 3.098 |
| 5051 | PAFAH2 | platelet activating factor acetylhydrolase 2 | -0.786 | 1.792 |
| 149420 | PDIK1L | PDIM1 interacting kinase 1 like | 1.697 | 4.521 |
| 91544 | UBXN11 | UBX domain protein 11 | -1.465 | 3.678 |
| 1043 | CD52 | CD52 molecule | -2.349 | 2.742 |
| 55057 | CRYBG2 | crystallin beta-gamma domain containing 2 | 1.751 | 5.759 |
| 101928324 | DHDDS-AS1 | DHDDS antisense RNA 1 | 1.093 | 1.648 |
| 3151 | HMGN2 | high mobility group nucleosomal binding domain 2 | 1.878 | 3.791 |
| 55650 | PIGV | phosphatidylinositol glycan anchor biosynthesis class V | 0.614 | 1.482 |
| 84243 | ZDHC18 | zinc finger DHHC-type palmitoyltransferase 18 | 1.504 | 2.887 |
| 10726 | NUDC | nuclear distribution C, dynein complex regulator | -0.675 | 4.525 |
| 388610 | TRNP1 | TMF1 regulated nuclear protein 1 | -3.199 | 4.506 |
| 23038 | WDTC1 | WD and tetratricopeptide repeats 1 | 0.672 | 2.668 |
| 84065 | TMEM222 | transmembrane protein 222 | 0.404 | 1.406 |
| 84958 | SYTL1 | synaptotagmin like 1 | 1.617 | 12.667 |
| 9064 | MAP3K6 | mitogen-activated protein kinase kinase kinase 6 | -1.013 | 2.344 |
| 27245 | AHDC1 | AT-hook DNA binding motif containing 1 | -1.454 | 5.625 |
| 23673 | STX12 | syntaxin 12 | -1.157 | 8.882 |
| 6118 | RPA2 | replication protein A2 | 0.59 | 1.761 |
| 93974 | ATP5IF1 | ATP synthase inhibitory factor subunit 1 | 1.124 | 12.077 |
| 83667 | SESN2 | sestrin 2 | 2.023 | 5.811 |
| 54797 | MED18 | mediator complex subunit 18 | 1.219 | 5.123 |
| 65979 | PHACTR4 | phosphatase and actin regulator 4 | -0.452 | 2.054 |
| 54952 | TRNAU1AP | tRNA selenocysteine 1 associated protein 1 | 0.668 | 2.249 |
| 85028 | SNHG12 | small nucleolar RNA host gene 12 | 1.469 | 4.488 |
| 692212 | SNORD99 | small nucleolar RNA, C/D box 99 | 2.039 | 2.162 |
| 677825 | SNORA44 | small nucleolar RNA, H/ACA box 44 | 1.888 | 2.595 |
| 10691 | GMEB1 | glucocorticoid modulatory element binding protein 1 | 0.523 | 1.39 |
| 51102 | MECR | mitochondrial trans-2-enoyl-CoA reductase | -0.813 | 1.633 |
| 10076 | PTPRU | protein tyrosine phosphatase receptor type U | -1.894 | 1.999 |
| 9672 | SDC3 | syndecan 3 | -3.312 | 6.365 |
| 51538 | ZCCHC17 | zinc finger CCHC-type containing 17 | 0.493 | 1.481 |
| 347735 | SERINC2 | serine incorporator 2 | 2.648 | 10.1 |
| 3061 | HCRT1 | hypocretin receptor 1 | 0.761 | 1.636 |
| 553115 | PEF1 | penta-EF-hand domain containing 1 | 0.808 | 3.318 |
| 8073 | PTP4A2 | protein tyrosine phosphatase 4A2 | -0.59 | 3.185 |
| 55116 | TMEM39B | transmembrane protein 39B | -1.063 | 3.65 |
| 56063 | TMEM234 | transmembrane protein 234 | 0.629 | 2.381 |
| 55721 | IQCC | IQ motif containing C | 0.889 | 1.885 |
| 3932 | LCK | LCK proto-oncogene, Src family tyrosine kinase | -3.375 | 3.104 |
| 65108 | MARCKSL1 | MARCKS like 1 | -1.437 | 4.911 |
| 81629 | TSSK3 | testis specific serine kinase 3 | 0.579 | 1.956 |
| 55108 | BSDC1 | BSD domain containing 1 | 0.712 | 4.559 |
| 57648 | KIAA1522 | KIAA1522 | -2.765 | 8.811 |
| 8565 | YARS1 | tyrosyl-tRNA synthetase 1 | -0.411 | 1.674 |
| 64766 | S100PBP | S100P binding protein | 0.591 | 1.973 |
| 55223 | TRIM62 | tripartite motif containing 62 | -1.094 | 3.218 |
| 149076 | ZNF362 | zinc finger protein 362 | -0.801 | 2.558 |
| 1912 | PHC2 | polyhomeotic homolog 2 | 1.095 | 3.047 |
| 100500853 | MIR3605 | microRNA 3605 | 1.073 | 2.1 |
| 7579 | ZSCAN20 | zinc finger and SCAN domain containing 20 | -0.922 | 1.405 |
| 58512 | DLGAP3 | DLG associated protein 3 | -1.465 | 2.059 |
| 339488 | TFAP2E | transcription factor AP-2 epsilon | 0.83 | 1.672 |
| 105378645 | TFAP2E-AS1 | TFAP2E antisense RNA 1 | 1.012 | 2.39 |
| 127703 | C1orf216 | chromosome 1 open reading frame 216 | -0.739 | 1.561 |
| 63967 | CLSPN | claspin | 2.972 | 3.499 |
| 192670 | AGO4 | argonaute RISC component 4 | 0.851 | 6.607 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 26523 | AGO1 | argonaute RISC component 1 | -0.869 | 1.63 |
| 54936 | ADPRS | ADP-ribosylserine hydrolase | -0.674 | 2.573 |
| 1296 | COL8A2 | collagen type VIII alpha 2 chain | -2.483 | 8.383 |
| 79729 | SH3D21 | SH3 domain containing 21 | 1.32 | 2.368 |
| 127700 | OSCP1 | organic solute carrier partner 1 | 1.708 | 3.174 |
| 80149 | ZC3H12A | zinc finger CCCH-type containing 12A | 1.694 | 2.512 |
| 102465438 | MIR6732 | microRNA 6732 | 3.098 | 5.814 |
| 29889 | GNL2 | G protein nucleolar 2 | -0.44 | 1.863 |
| 55143 | CDCA8 | cell division cycle associated 8 | 3.379 | 4.897 |
| 4520 | MTF1 | metal regulatory transcription factor 1 | 1.325 | 7.887 |
| 105378657 | LOC105378657 | uncharacterized LOC105378657 | 2.374 | 1.553 |
| 64121 | RRAGC | Ras related GTP binding C | 0.616 | 2.525 |
| 100527950 | GJA9-MYCBP | GJA9-MYCBP readthrough | 0.777 | 2.807 |
| 26292 | MYCBP | MYC binding protein | 0.771 | 2.765 |
| 643314 | KIAA0754 | replaced by ID 23499 | 1.67 | 7.346 |
| 8761 | PABPC4 | poly(A) binding protein cytoplasmic 4 | -0.958 | 3.04 |
| 101929516 | PABPC4-AS1 | PABPC4 antisense RNA 1 | -0.992 | 3.099 |
| 677834 | SNORA55 | small nucleolar RNA, H/ACA box 55 | -1.612 | 3.259 |
| 105378951 | LOC105378951 | long intergenic non-protein coding RNA 2811 | 1.622 | 3.571 |
| 107985740 | LINC02811 | | 1.472 | 2.243 |
| 105378665 | LOC105378665 | | 1.467 | 1.621 |
| 54802 | TRIT1 | tRNA isopentenyltransferase 1 | -1.326 | 6.818 |
| 4610 | MYCL | MYCL proto-oncogene, bHLH transcription factor | -3.982 | 11.515 |
| 105378668 | MYCL-AS1 | MYCL antisense RNA 1 | -3.936 | 10.069 |
| 84879 | MFS2D2A | MFS2D2 lysolipid transporter A, lysophospholipid | -1.287 | 2.582 |
| 10487 | CAP1 | cyclase associated actin cytoskeleton regulatory protein 1 | 0.822 | 4.636 |
| 5538 | PPT1 | palmitoyl-protein thioesterase 1 | -0.365 | 1.402 |
| 107984945 | LOC107984945 | replaced by ID 64744 | -2.398 | 3.42 |
| 65243 | ZFP69B | ZFP69 zinc finger protein B | -1.239 | 1.746 |
| 9783 | RIMS3 | regulating synaptic membrane exocytosis 3 | -1.505 | 2.128 |
| 163732 | CITED4 | Cbp/p300 interacting transactivator with Glu/Asp rich carboxy-terminal domain 4 | 2.229 | 8.697 |
| 22955 | SCMH1 | Scm polycomb group protein homolog 1 | 1.049 | 1.973 |
| 59269 | HIVEP3 | HIVEP zinc finger 3 | -3.549 | 14.786 |
| 4904 | YBX1 | Y-box binding protein 1 | -0.657 | 2.894 |
| 374969 | SVBP | small vasohibin binding protein | 0.411 | 1.357 |
| 10969 | EBNA1BP2 | EBNA1 binding protein 2 | -0.589 | 2.158 |
| 991 | CDC20 | cell division cycle 20 | 3.079 | 3.598 |
| 81888 | HY1 | hydroxypyruvate isomerase (putative) | 0.676 | 2.118 |
| 1802 | DPH2 | diphthamide biosynthesis 2 | -1.217 | 8.559 |
| 533 | ATP6V0B | ATPase H ⁺ transporting V0 subunit b | 0.435 | 1.739 |
| 8704 | B4GALT2 | beta-1,4-galactosyltransferase 2 | 1.63 | 2.089 |
| 149473 | CCDC24 | coiled-coil domain containing 24 | -1.292 | 1.944 |
| 79033 | ERI3 | ERI1 exoribonuclease family member 3 | -0.635 | 2.575 |
| 55182 | RNF220 | ring finger protein 220 | -0.501 | 1.532 |
| 339541 | ARMH1 | armadillo like helical domain containing 1 | 2.198 | 10.385 |
| 105378690 | LOC105378690 | uncharacterized LOC105378690 | 2.072 | 4.505 |
| 26828 | RNU5F-1 | RNA, U5F small nuclear 1 | 1.903 | 1.608 |
| 26830 | RNU5D-1 | RNA, U5D small nuclear 1 | 1.892 | 1.332 |
| 11004 | KIF2C | kinesin family member 2C | 3.348 | 3.263 |
| 8891 | EIF2B3 | eukaryotic translation initiation factor 2B subunit gamma | -1.495 | 5.77 |
| 4595 | MUTYH | mutY DNA glycosylase | -0.899 | 3.049 |
| 10420 | TESK2 | testis associated actin remodelling kinase 2 | 0.908 | 2.89 |
| 25974 | MMACHC | metabolism of cobalamin associated C | -1.935 | 12.304 |
| 5052 | PRDX1 | peroxiredoxin 1 | -2.077 | 12.191 |
| 10327 | AKR1A1 | aldo-keto reductase family 1 member A1 | -1.106 | 9.496 |
| 149483 | CCDC17 | coiled-coil domain containing 17 | 1.121 | 3.827 |
| 60313 | GPBP1L1 | GC-rich promoter binding protein 1 like 1 | 0.428 | 1.404 |
| 51249 | TMEM69 | transmembrane protein 69 | -0.913 | 4.576 |
| 3652 | IPP | intracisternal A particle-promoted polypeptide | 1.613 | 4.412 |
| 23139 | MAST2 | microtubule associated serine/threonine kinase 2 | 1.399 | 9.91 |
| 8503 | PIK3R3 | phosphoinositide-3-kinase regulatory subunit 3 | -1.427 | 1.468 |
| 55624 | POMGNT1 | protein O-linked mannose N-acetylglucosaminyltransferase 1 (beta 1,2-) | -0.841 | 1.763 |
| 8438 | RAD54L | RAD54 like | 1.799 | 3.091 |
| 148932 | MOB3C | MOB kinase activator 3C | -0.738 | 1.98 |
| 9813 | EFCAB14 | EF-hand calcium binding domain 14 | -0.494 | 1.853 |
| 6491 | STIL | STIL centriolar assembly protein | 2.672 | 3.617 |
| 51727 | CMPK1 | cytidine/uridine monophosphate kinase 1 | -0.598 | 2.325 |
| 54558 | SPATA6 | spermatogenesis associated 6 | -2.105 | 5.846 |
| 112268262 | LOC112268262 | replaced by ID 11124 | 1.744 | 1.594 |
| 1031 | CDKN2C | cyclin dependent kinase inhibitor 2C | 2.301 | 9.804 |
| 26994 | RNF11 | ring finger protein 11 | 0.425 | 1.609 |
| 105378720 | EPS15-AS1 | EPS15 antisense RNA 1 | 2.217 | 2.851 |
| 114883 | OSBPL9 | oxysterol binding protein like 9 | 0.533 | 2.12 |
| 4998 | ORC1 | origin recognition complex subunit 1 | 3.178 | 3.707 |
| 84950 | PRPF38A | pre-mRNA processing factor 38A | 1.102 | 4.731 |
| 23318 | TUT4 | terminal uridyl transferase 4 | 1.138 | 4.85 |
| 2882 | GPX7 | glutathione peroxidase 7 | 2.021 | 2.963 |
| 65260 | COA7 | cytochrome c oxidase assembly factor 7 | -0.993 | 3.819 |
| 6342 | SCP2 | sterol carrier protein 2 | 0.555 | 1.373 |
| 7804 | LRP8 | LDL receptor related protein 8 | 1.089 | 1.715 |
| 107984957 | LINC02812 | long intergenic non-protein coding RNA 2812 | -4.433 | 9.126 |
| 51668 | HSPB11 | heat shock protein family B (small) member 11 | 0.883 | 1.854 |
| 115353 | LRRC42 | leucine rich repeat containing 42 | 1.239 | 4.926 |
| 23648 | SSBP3 | single stranded DNA binding protein 3 | -1.184 | 3.312 |
| 55001 | TTC22 | tetratricopeptide repeat domain 22 | 2.274 | 4.89 |
| 1718 | DHCR24 | 24-dehydrocholesterol reductase | 2.551 | 4.405 |
| 7809 | BSND | barttin CLCNK type accessory subunit beta | 4.25 | 7.076 |
| 255738 | PCSK9 | proprotein convertase subtilisin/kexin type 9 | 7.849 | 11.537 |
| 8613 | PLPP3 | phospholipid phosphatase 3 | 3.906 | 8.215 |
| 4070 | TACSTD2 | tumor associated calcium signal transducer 2 | 3.014 | 1.321 |
| 112268263 | LOC112268263 | uncharacterized LOC112268263 | 3.479 | 3.141 |
| 105378751 | LOC105378751 | uncharacterized LOC105378751 | 3.819 | 1.971 |
| 3725 | JUN | Jun proto-oncogene, AP-1 transcription factor subunit | -0.761 | 2.163 |
| 55277 | FGGY | FGGY carbohydrate kinase domain containing | 1.12 | 2.36 |
| 83941 | TM2D1 | TM2 domain containing 1 | 0.965 | 3.345 |
| 7398 | USP1 | ubiquitin specific peptidase 1 | 1.688 | 3.232 |
| 85440 | DOCK7 | dedicator of cytokinesis 7 | -1.728 | 6.28 |
| 84938 | ATG4C | autophagy related 4C cysteine peptidase | -0.817 | 2.101 |
| 5236 | PGM1 | phosphoglucomutase 1 | 1.681 | 13.118 |
| 55225 | RAVER2 | ribonucleoprotein, PTB binding 2 | 1.094 | 1.952 |
| 57708 | MIER1 | MIER1 transcriptional regulator | 1.205 | 4.007 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 1647 | GADD45A | growth arrest and DNA damage inducible alpha | 3.242 | 10.862 |
| 55635 | DEPDC1 | DEP domain containing 1 | 3.132 | 2.608 |
| 81573 | ANKRD13C | ankyrin repeat domain 13C | -1.22 | 3.575 |
| 11147 | HLA3 | HERV-H LTR-associating 3 | -1.282 | 2.462 |
| 1491 | CTH | cystathionine gamma-lyase | 2.602 | 2.196 |
| 100132618 | ZRANB2-AS1 | ZRANB2 antisense RNA 1 | 0.729 | 1.888 |
| 9406 | ZRANB2 | zinc finger RANBP2-type containing 2 | 0.633 | 1.702 |
| 127253 | TYW3 | tRNA- γ W synthesizing protein 3 homolog | -0.85 | 1.696 |
| 256435 | ST6GALNAC3 | ST6 N-acetylgalactosaminide alpha-2,6-sialyltransferase 3 | 2.307 | 10.553 |
| 10026 | PIGK | phosphatidylinositol glycan anchor biosynthesis class K | 1.042 | 1.906 |
| 8880 | FUBP1 | far upstream element binding protein 1 | 0.718 | 2.678 |
| 10964 | IFI44L | interferon induced protein 44 like | -3.952 | 5.09 |
| 10561 | IFI44 | interferon induced protein 44 | -2.96 | 2.918 |
| 2787 | GNG5 | G protein subunit gamma 5 | 0.67 | 2.089 |
| 1486 | CTBS | chitobiase | 0.501 | 1.553 |
| 105378819 | LOC105378819 | uncharacterized LOC105378819 | 0.873 | 2.224 |
| 117178 | SSX2IP | SSX family member 2 interacting protein | 1.027 | 1.483 |
| 255231 | MCOLN2 | mucolipin TRP cation channel 2 | -3.118 | 4.229 |
| 57489 | ODF2L | outer dense fiber of sperm tails 2 like | -0.852 | 2.973 |
| 9403 | SELENOF | selenoprotein F | -0.523 | 3.238 |
| 9653 | HS2ST1 | heparan sulfate 2-O-sulfotransferase 1 | -1.194 | 3.62 |
| 2635 | GBP3 | guanylate binding protein 3 | -2.415 | 10.102 |
| 2633 | GBP1 | guanylate binding protein 1 | -2.708 | 2.565 |
| 115361 | GBP4 | guanylate binding protein 4 | -3.173 | 5.027 |
| 400759 | GBP1P1 | guanylate binding protein 1 pseudogene 1 | -3.817 | 3.487 |
| 84230 | LRRC8C | leucine rich repeat containing 8 VRAC subunit C | -1.828 | 11.067 |
| 400761 | LRRC8C-DT | LRRC8C divergent transcript | -2.981 | 2.461 |
| 107985743 | LOC107985743 | uncharacterized LOC107985743 | -2.86 | 2.109 |
| 101927952 | LOC101927952 | | -2.542 | 3.293 |
| 55144 | LRRC8D | leucine rich repeat containing 8 VRAC subunit D | -0.686 | 3.604 |
| 8317 | CDC7 | cell division cycle 7 | 2.059 | 3.507 |
| 11146 | GLMN | glomulin, FKBP associated protein | 1.077 | 1.445 |
| 2672 | GF1 | growth factor independent 1 transcriptional repressor | 3.428 | 2.262 |
| 7813 | EVI5 | ecotropic viral integration site 5 | -0.938 | 4.451 |
| 22823 | MTF2 | metal response element binding transcription factor 2 | 0.568 | 1.556 |
| 343099 | CCDC18 | coiled-coil domain containing 18 | 0.851 | 3.437 |
| 1810 | DR1 | down-regulator of transcription 1 | 0.463 | 1.588 |
| 2730 | GCLM | glutamate-cysteine ligase modifier subunit | 2.569 | 8.671 |
| 5825 | ABCD3 | ATP binding cassette subfamily D member 3 | 0.791 | 1.6 |
| 148534 | TLC4D | TLC domain containing 4 | 4.609 | 8.25 |
| 100527978 | TLC4D-RWDD3 | TLC4D-RWDD3 readthrough | 1.458 | 3.351 |
| 58155 | PTBP2 | polypyrimidine tract binding protein 2 | 1.581 | 3.949 |
| 178 | AGL | amylo-alpha-1, 6-glucosidase, 4-alpha-glucanotransferase | 1.823 | 12.406 |
| 163786 | SASS6 | SAS-6 centriolar assembly protein | 1.063 | 2.534 |
| 8556 | CDC14A | cell division cycle 14A | 0.428 | 1.357 |
| 148867 | SLC30A7 | solute carrier family 30 member 7 | -0.433 | 1.974 |
| 55170 | PRMT6 | protein arginine methyltransferase 6 | -1.9 | 3.358 |
| 10451 | VAV3 | vav guanine nucleotide exchange factor 3 | 0.59 | 3.004 |
| 113802 | HENMT1 | HEN methyltransferase 1 | 0.795 | 2.089 |
| 29899 | GPSM2 | G protein signaling modulator 2 | 1.49 | 2.553 |
| 22911 | WDR47 | WD repeat domain 47 | 0.611 | 2.125 |
| 6884 | TAF13 | TATA-box binding protein associated factor 13 | 0.855 | 1.831 |
| 57535 | ELAPOR1 | endosome-lysosome associated apoptosis and autophagy regulator 1 | 2.02 | 1.327 |
| 6301 | SARS1 | seryl-tRNA synthetase 1 | -0.72 | 4.897 |
| 1952 | CELSR2 | cadherin EGF LAG seven-pass G-type receptor 2 | -2.007 | 1.74 |
| 6272 | SORT1 | sortilin 1 | 1.056 | 4.559 |
| 5686 | PSMA5 | proteasome 20S subunit alpha 5 | -0.804 | 6.695 |
| 284613 | CYB561D1 | cytochrome b561 family member D1 | 0.718 | 3.251 |
| 2773 | GNAI3 | G protein subunit alpha i3 | 0.817 | 3.087 |
| 1435 | CSF1 | colony stimulating factor 1 | 1.9 | 2.77 |
| 85369 | STRIP1 | striatin interacting protein 1 | 0.555 | 1.336 |
| 64783 | RBM15 | RNA binding motif protein 15 | 0.565 | 1.34 |
| 9122 | SLC16A4 | solute carrier family 16 member 4 | 1.284 | 2.792 |
| 10542 | LAMTOR5 | late endosomal/lysosomal adaptor, MAPK and MTOR activator 5 | 1.051 | 7.156 |
| 3738 | KCNA3 | potassium voltage-gated channel subfamily A member 3 | -2.59 | 4.063 |
| 128338 | DRAM2 | DNA damage regulated autophagy modulator 2 | -1.107 | 3.689 |
| 10390 | CEPT1 | choline/ethanolamine phosphotransferase 1 | -0.578 | 2.087 |
| 79961 | DENND2D | DENN domain containing 2D | 0.631 | 2.704 |
| 128346 | C1orf162 | chromosome 1 open reading frame 162 | -0.549 | 1.933 |
| 100129269 | LINC01160 | long intergenic non-protein coding RNA 1160 | 1.16 | 1.892 |
| 55924 | INKA2 | inka box actin regulator 2 | 1.203 | 1.665 |
| 55917 | CTTNBP2NL | CTTNBP2 N-terminal like | -2.409 | 5.953 |
| 54879 | ST7L | suppression of tumorigenicity 7 like | 0.681 | 2.604 |
| 829 | CAPZA1 | capping actin protein of muscle Z-line subunit alpha 1 | 0.546 | 1.323 |
| 4343 | MOV10 | Mov10 RISC complex RNA helicase | -2.575 | 12.515 |
| 389 | RHOC | ras homolog family member C | -2.815 | 5.286 |
| 6566 | SLC16A1 | solute carrier family 16 member 1 | -2.706 | 5.46 |
| 9860 | LRIG2 | leucine rich repeats and immunoglobulin like domains 2 | -0.609 | 1.888 |
| 10745 | PHTF1 | putative homeodomain transcription factor 1 | 1.234 | 8.09 |
| 54665 | RSBN1 | round spermatid basic protein 1 | 1.887 | 7.884 |
| 100287722 | AP4B1-AS1 | AP4B1 antisense RNA 1 | 1.184 | 3.849 |
| 26191 | PTPN22 | protein tyrosine phosphatase non-receptor type 22 | 1.847 | 5.094 |
| 440603 | BCL2L15 | BCL2 like 15 | 3.759 | 4.581 |
| 10717 | AP4B1 | adaptor related protein complex 4 subunit beta 1 | 0.945 | 4.713 |
| 204851 | HIPK1 | homeodomain interacting protein kinase 1 | 1.023 | 4.491 |
| 163259 | DENND2C | DENN domain containing 2C | 3.272 | 5.635 |
| 7252 | TSHB | thyroid stimulating hormone subunit beta | 3.205 | 2.144 |
| 10100 | TSPAN2 | tetraspanin 2 | 3.847 | 8.72 |
| 105378916 | LINC01765 | long intergenic non-protein coding RNA 1765 | 3.142 | 4.162 |
| 101928977 | LOC101928977 | uncharacterized LOC101928977 | 1.936 | 2.219 |
| 55356 | SLC22A15 | solute carrier family 22 member 15 | 1.556 | 5.599 |
| 126868 | MAB21L3 | mab-21 like 3 | 2.543 | 2.35 |
| 476 | ATP1A1 | ATPase Na+/K+ transporting subunit alpha 1 | -1.144 | 9.613 |
| 84852 | ATP1A1-AS1 | ATP1A1 antisense RNA 1 | -1.071 | 10.478 |
| 914 | CD2 | CD2 molecule | -3.216 | 2.829 |
| 5738 | PTGFRN | prostaglandin F2 receptor inhibitor | -2.278 | 3.718 |
| 10905 | MAN1A2 | mannosidase alpha class 1A member 2 | -0.698 | 2.217 |
| 54855 | TENT5C | terminal nucleotidyltransferase 5C | 2.232 | 5.633 |
| 10885 | WDR3 | WD repeat domain 3 | -1.235 | 4.466 |
| 200162 | SPAG17 | sperm associated antigen 17 | -1.627 | 1.323 |
| 10352 | WARS2 | tryptophanyl tRNA synthetase 2, mitochondrial | -1.315 | 4.255 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 90874 | ZNF697 | zinc finger protein 697 | -1.511 | 1.406 |
| 4853 | NOTCH2 | notch receptor 2 | -1.675 | 4.726 |
| 105378954 | LOC105378954 | | 0.845 | 3.038 |
| 728841 | NBPF8 | NBPF member 8 | -1.284 | 2.704 |
| 100996724 | PDE4DIPP2 | PDE4DIP pseudogene 2 | -0.883 | 2.064 |
| 101929796 | NOTCH2NLR | notch 2 N-terminal like R | -1.654 | 1.816 |
| 101060684 | NBPF26 | NBPF member 26 | -1.628 | 2.331 |
| 728855 | LINC00623 | long intergenic non-protein coding RNA 623 | 1.029 | 4.372 |
| 105369199 | LOC105369199 | NBPF member 6 pseudogene | 2.265 | 1.894 |
| 653464 | SRGAP2C | SLIT-ROBO Rho GTPase activating protein 2C | -0.812 | 2.956 |
| 107985193 | LOC107985193 | uncharacterized LOC107985193 | -1.473 | 2.426 |
| 647121 | EMBP1 | embigin pseudogene 1 | 2.556 | 10.682 |
| 199882 | PDE4DIPP3 | PDE4DIP pseudogene 3 | 2.099 | 1.425 |
| 440686 | H3-7 | H3.7 histone (putative) | -1.503 | 1.31 |
| 100996712 | SRGAP2D | SLIT-ROBO Rho GTPase activating protein 2D (pseudogene) | -0.796 | 1.843 |
| 284565 | NBPF15 | NBPF member 15 | -1.385 | 6.118 |
| 647135 | SRGAP2B | SLIT-ROBO Rho GTPase activating protein 2B | -1.022 | 3.012 |
| 107985595 | LOC107985595 | uncharacterized LOC107985595 | -1.607 | 2.605 |
| 100288142 | NBPF20 | NBPF member 20 | -1.186 | 5.228 |
| 105371312 | LOC105371312 | uncharacterized LOC105371312 | -1.281 | 1.751 |
| 101929780 | NBPF25P | NBPF member 25, pseudogene | -1.086 | 3.775 |
| 10623 | POLR3C | RNA polymerase III subunit C | -0.436 | 2.012 |
| 10401 | PIAS3 | protein inhibitor of activated STAT 3 | -0.771 | 1.494 |
| 10628 | TXNIP | thioredoxin interacting protein | -1.422 | 9.505 |
| 100132406 | NBPF10 | NBPF member 10 | -1.318 | 3.19 |
| 388677 | NOTCH2NLA | notch 2 N-terminal like A | -1.575 | 5.432 |
| 170688 | NUDT4P2 | nudix hydrolase 4 pseudogene 2 | 1.106 | 3.259 |
| 102724364 | SEC22B4P | SEC22 homolog B4, pseudogene | 1.325 | 4.195 |
| 100996756 | LOC100996756 | uncharacterized LOC100996756 | 1.935 | 8.738 |
| 149013 | NBPF12 | NBPF member 12 | -0.536 | 2.398 |
| 9557 | CHD1L | chromodomain helicase DNA binding protein 1 like | 0.522 | 2.423 |
| 2330 | FMO5 | flavin containing dimethylaniline monooxygenase 5 | -0.959 | 1.532 |
| 51205 | ACP6 | acid phosphatase 6, lysophosphatidic | 3.001 | 9.861 |
| 200030 | NBPF11 | NBPF member 11 | -0.456 | 2.284 |
| 388685 | LINC01138 | long intergenic non-protein coding RNA 1138 | 0.878 | 3.404 |
| 25832 | NBPF14 | NBPF member 14 | -1.36 | 2.556 |
| 100996763 | NOTCH2NLB | notch 2 N-terminal like B | -1.657 | 7.067 |
| 440672 | NUDT4B | nudix hydrolase 4B | 1.137 | 3.107 |
| 100996517 | SEC22B3P | SEC22 homolog B3, pseudogene | 0.829 | 2.04 |
| 400818 | NBPF9 | NBPF member 9 | -1.518 | 7.938 |
| 653513 | LOC653513 | phosphodiesterase 4D interacting protein-like | -1.506 | 1.701 |
| 100996716 | SEC22B2P | SEC22 homolog B2, pseudogene | 0.903 | 2.135 |
| 100996717 | NOTCH2NLC | notch 2 N-terminal like C | -1.545 | 8.357 |
| 101060226 | NBPF19 | NBPF member 19 | -1.175 | 3.727 |
| 57234 | LINC00869 | long intergenic non-protein coding RNA 869 | 1.187 | 6.253 |
| 644634 | LOC644634 | uncharacterized LOC644634 | 0.834 | 1.357 |
| 102723955 | PDE4DIPP7 | PDE4DIP pseudogene 7 | 2.494 | 2.489 |
| 10903 | MTMR11 | myotubularin related protein 11 | -3.677 | 14.046 |
| 11311 | VPS45 | vacuolar protein sorting 45 homolog | -1.664 | 15.604 |
| 51177 | PLEKH01 | pleckstrin homology domain containing O1 | -3.137 | 19.77 |
| 105371433 | LINC02988 | long intergenic non-protein coding RNA 2988 | -2.845 | 7.337 |
| 81611 | ANP32E | acidic nuclear phosphoprotein 32 family member E | 1.294 | 3.193 |
| 51107 | APH1A | aph-1 homolog A, gamma-secretase subunit | -0.449 | 2.027 |
| 79630 | C1orf54 | chromosome 1 open reading frame 54 | -1.954 | 4.942 |
| 54460 | MRPS21 | mitochondrial ribosomal protein S21 | -0.654 | 2.728 |
| 100289061 | ADAMTSL4-AS2 | ADAMTSL4 antisense RNA 2 | -1.74 | 4.088 |
| 54507 | ADAMTSL4 | ADAMTS like 4 | -2.029 | 11.235 |
| 2029 | ENSA | endosulfine alpha | 0.775 | 3.855 |
| 1520 | CTSS | cathepsin S | -1.485 | 4.855 |
| 8416 | ANXA9 | annexin A9 | 1.754 | 12.823 |
| 55793 | MINDY1 | MINDY lysine 48 deubiquitinase 1 | 1.631 | 10.836 |
| 54964 | C1orf56 | chromosome 1 open reading frame 56 | 0.518 | 1.343 |
| 79626 | TNFAIP8L2 | TNF alpha induced protein 8 like 2 | -0.902 | 2.255 |
| 57592 | ZNF687 | zinc finger protein 687 | 0.717 | 2.323 |
| 5993 | RFX5 | regulatory factor X5 | -1.551 | 12.719 |
| 23126 | POGZ | pogo transposable element derived with ZNF domain | 0.426 | 2.147 |
| 81609 | SNX27 | sorting nexin 27 | -0.349 | 1.525 |
| 6281 | S100A10 | S100 calcium binding protein A10 | -1.446 | 2.671 |
| 105371441 | LOC105371441 | S100 calcium binding protein A9 | -1.875 | 2.088 |
| 6280 | S100A9 | S100 calcium binding protein A12 | 2.718 | 13.892 |
| 6283 | S100A12 | S100 calcium binding protein A8 | 3.524 | 17.499 |
| 6279 | S100A8 | S100 calcium binding protein A7A | 3.301 | 10.438 |
| 338324 | S100A7A | uncharacterized LOC101928034 | 2.681 | 2.516 |
| 101928034 | LOC101928034 | chromatin target of PRMT1 | -0.907 | 1.378 |
| 26097 | CHTOP | solute carrier family 27 member 3 | 0.423 | 1.8 |
| 11000 | SLC27A3 | solute carrier family 39 member 1 | -0.699 | 1.649 |
| 27173 | SLC39A1 | RAB13, member RAS oncogene family | -1.257 | 7.566 |
| 5872 | RAB13 | ribosomal protein S27 | 2.158 | 3.261 |
| 6232 | RPS27 | ATPase phospholipid transporting 8B2 | -0.802 | 3.025 |
| 57198 | ATP8B2 | phosphomevalonate kinase | -2.921 | 4.243 |
| 10654 | PMVK | CDC28 protein kinase regulatory subunit 1B | -0.971 | 3.184 |
| 1163 | CKS1B | DC-STAMP domain containing 1 | 1.559 | 2.379 |
| 149095 | DCST1 | ADAM metallopeptidase domain 15 | 1.015 | 1.316 |
| 8751 | ADAM15 | ephrin A4 | 1.111 | 5.669 |
| 1945 | EFNA4 | solute carrier family 50 member 1 | -1.252 | 2.288 |
| 55974 | SLC50A1 | mucin 1, cell surface associated | -0.506 | 1.513 |
| 4582 | MUC1 | thrombospondin 3 | 1.926 | 3.169 |
| 7059 | THBS3 | THBS3 antisense RNA 1 | 1.002 | 5.528 |
| 105371450 | THBS3-AS1 | metaxin 1 | 1.155 | 5.288 |
| 4580 | MTX1 | glucosylceramidase beta pseudogene 1 | 1.516 | 9.855 |
| 2630 | GBAP1 | glucosylceramidase beta 1 | 1.909 | 9.201 |
| 2629 | GBA1 | secretory carrier membrane protein 3 | 1.781 | 7.513 |
| 10067 | SCAMP3 | farnesyl diphosphate synthase | -0.446 | 2.002 |
| 2224 | FDPS | RUSC1 antisense RNA 1 | 0.774 | 3.423 |
| 284618 | RUSC1-AS1 | death associated protein 3 | 0.81 | 3.771 |
| 7818 | DAP3 | synaptotagmin 11 | -0.422 | 1.35 |
| 23208 | SYT11 | Ras like without CAAAX 1 | -1.317 | 2.616 |
| 6016 | RIT1 | KH domain containing 4, pre-mRNA splicing factor | 0.704 | 1.635 |
| 22889 | KHDC4 | ubiquilin 4 | 0.489 | 1.456 |
| 56893 | UBQLN4 | semaphorin 4A | -1.148 | 4.991 |
| 64218 | SEMA4A | | 0.577 | 2.061 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|----------------|---|----------|----------|
| 9673 | SLC25A44 | solute carrier family 25 member 44 | 1.041 | 4.794 |
| 79957 | PAQR6 | progesterin and adipoQ receptor family member 6 | 0.996 | 2.923 |
| 23381 | SMG5 | SMG5 nonsense mediated mRNA decay factor | 0.634 | 2.383 |
| 84283 | TMEM79 | transmembrane protein 79 | 1.15 | 6.018 |
| 7203 | CCT3 | chaperonin containing TCP1 subunit 3 | -1.383 | 15.308 |
| 128239 | IQGAP3 | IQ motif containing GTPase activating protein 3 | 3.156 | 1.521 |
| 128240 | NAXE | NAD(P)HX epimerase | -0.516 | 1.962 |
| 54865 | GPATCH4 | G-patch domain containing 4 (gene/pseudogene) | -1.334 | 5.908 |
| 51093 | METTL25B | methyltransferase like 25B | -0.448 | 1.323 |
| 79590 | MRPL24 | mitochondrial ribosomal protein L24 | -1.08 | 3.248 |
| 3068 | HDGF | heparin binding growth factor | 0.878 | 3.474 |
| 9047 | SH2D2A | SH2 domain containing 2A | -1.811 | 1.433 |
| 9826 | ARHGEF11 | Rho guanine nucleotide exchange factor 11 | -1.351 | 3.714 |
| 83416 | FCRL5 | Fc receptor like 5 | -6.239 | 13.233 |
| 115352 | FCRL3 | Fc receptor like 3 | -5.308 | 9.771 |
| 912 | CD1D | CD1d molecule | -2.649 | 16.627 |
| 909 | CD1A | CD1a molecule | -4.379 | 10.797 |
| 911 | CD1C | CD1c molecule | -3.968 | 6.733 |
| 391114 | OR6K3 | olfactory receptor family 6 subfamily K member 3 | 4.702 | 7.372 |
| 128372 | OR6N1 | olfactory receptor family 6 subfamily N member 1 | 2.139 | 3.711 |
| 81442 | OR6N2 | olfactory receptor family 6 subfamily N member 2 | 3.284 | 1.892 |
| 4332 | MNDA | myeloid cell nuclear differentiation antigen | 1.054 | 2.341 |
| 149628 | PYHIN1 | pyrin and HIN domain family member 1 | -3.814 | 4.525 |
| 3428 | IFI16 | interferon gamma inducible protein 16 | -1.437 | 3.357 |
| 343413 | FCRL6 | Fc receptor like 6 | -2.191 | 2.302 |
| 56833 | SLAMF8 | SLAM family member 8 | -1.66 | 4.347 |
| 284677 | SNHG28 | small nucleolar RNA host gene 28 | -1.068 | 1.495 |
| 57549 | IGSF9 | immunoglobulin superfamily member 9 | 1.647 | 1.408 |
| 93183 | PIGM | phosphatidylinositol glycan anchor biosynthesis class M | -0.809 | 1.328 |
| 93185 | IGSF8 | immunoglobulin superfamily member 8 | -2.365 | 12.192 |
| 729867 | LOC729867 | uncharacterized LOC729867 | -2.218 | 8.735 |
| 8682 | PEA15 | proliferation and apoptosis adaptor protein 15 | -2.84 | 20.463 |
| 107985219 | LOC107985219 | uncharacterized LOC107985219 | -0.746 | 1.819 |
| 1314 | COPA | COP1 coat complex subunit alpha | -0.827 | 3.978 |
| 23385 | NCSTN | nicastrin | -0.457 | 1.822 |
| 114836 | SLAMF6 | SLAM family member 6 | -2.956 | 2.698 |
| 8832 | CD84 | CD84 molecule | -2.106 | 11.941 |
| 962 | CD48 | CD48 molecule | -1.707 | 16.622 |
| 57823 | SLAMF7 | SLAM family member 7 | -2.757 | 3.346 |
| 4063 | LY9 | lymphocyte antigen 9 | -3.684 | 5.49 |
| 51744 | CD244 | CD244 molecule | -2.188 | 5.173 |
| 100131187 | TSTD1 | thiosulfate sulfurtransferase like domain containing 1 | 1.919 | 4.975 |
| 5202 | PFDN2 | prefoldin subunit 2 | -0.557 | 1.613 |
| 2214 | FCGR3A | Fc gamma receptor IIIa | -1.486 | 2.518 |
| 9103 | FCGR2C | Fc gamma receptor IIc (gene/pseudogene) | -1.804 | 5.004 |
| 3311 | HSPA7 | heat shock protein family A (Hsp70) member 7 (pseudogene) | -2.55 | 6.735 |
| 2213 | FCGR2B | Fc gamma receptor IIb | -1.92 | 3.815 |
| 84824 | FCRLA | Fc receptor like A | -5.657 | 5.413 |
| 22926 | ATF6 | activating transcription factor 6 | -0.569 | 2.101 |
| 9722 | NOS1AP | nitric oxide synthase 1 adaptor protein | 3.033 | 4.059 |
| 105371475 | LOC105371475 | uncharacterized LOC105371475 | 4.732 | 4.812 |
| 284680 | SPATA46 | spermatogenesis associated 46 | 3.256 | 2.494 |
| 400793 | C1orf226 | chromosome 1 open reading frame 226 | 3.496 | 4.407 |
| 117157 | SH2D1B | SH2 domain containing 1B | -3.066 | 4.98 |
| 6675 | UAP1 | UDP-N-acetylglucosamine pyrophosphorylase 1 | 1.693 | 5.068 |
| 51478 | HSD17B7 | hydroxysteroid 17-beta dehydrogenase 7 | -1.133 | 1.613 |
| 83540 | NUF2 | NUF2 component of NDC80 kinetochore complex | 3.362 | 3.905 |
| 4259 | MGST3 | microsomal glutathione S-transferase 3 | -0.785 | 2.065 |
| 10223 | GPA33 | glycoprotein A33 | -4.04 | 5.504 |
| 919 | CD247 | CD247 molecule | -3.761 | 3.357 |
| 25874 | MPC2 | mitochondrial pyruvate carrier 2 | 2.081 | 7.496 |
| 55827 | DCAF6 | DDB1 and CUL4 associated factor 6 | 0.837 | 5.047 |
| 23432 | GPR161 | G protein-coupled receptor 161 | -1.771 | 1.839 |
| 375035 | SFT2D2 | SFT2 domain containing 2 | -0.517 | 1.66 |
| 9095 | TBX19 | T-box transcription factor 19 | -0.796 | 1.625 |
| 481 | ATP1B1 | ATPase Na+/K+ transporting subunit beta 1 | -2.957 | 6.531 |
| 8548 | BLZF1 | basic leucine zipper nuclear factor 1 | 0.944 | 2.568 |
| 10560 | SLC19A2 | solute carrier family 19 member 2 | 1.421 | 6.788 |
| 2153 | F5 | coagulation factor V | 1.353 | 3.198 |
| 2329 | FMO4 | flavin containing dimethylaniline monooxygenase 4 | -0.894 | 1.494 |
| 51603 | METTL13 | methyltransferase 13, eEF1A lysine and N-terminal methyltransferase | -0.765 | 1.837 |
| 5279 | PIGC | phosphatidylinositol glycan anchor biosynthesis class C | 1.095 | 3.921 |
| 51430 | SUCO | SUN domain containing ossification factor | 1.996 | 5.728 |
| 7292 | TNFSF4 | TNF superfamily member 4 | 1.193 | 3.288 |
| 100506023 | LOC100506023 | uncharacterized LOC100506023 | 1.662 | 5.831 |
| 107985227 | LOC107985227 | PRDX6 antisense RNA 1 | 1.292 | 1.798 |
| 101928673 | PRDX6-AS1 | centromere protein L | 1.556 | 3.473 |
| 91687 | CENPL | small nucleolar RNA, C/D box 81 | 2.633 | 5.906 |
| 26769 | SNORD81 | small nucleolar RNA, C/D box 80 | 1.668 | 1.537 |
| 26774 | SNORD80 | small nucleolar RNA, C/D box 79 | 1.411 | 1.824 |
| 26770 | SNORD79 | small nucleolar RNA, C/D box 78 | 1.743 | 1.62 |
| 692198 | SNORD78 | small nucleolar RNA, C/D box 44 | 1.72 | 1.648 |
| 26806 | SNORD44 | small nucleolar RNA, C/D box 76 | 1.672 | 1.611 |
| 692196 | SNORD76 | zinc finger and BTB domain containing 37 | 1.519 | 2.886 |
| 84614 | ZBTB37 | RAB GTPase activating protein 1 like | 0.558 | 2.72 |
| 9910 | RABGAP1L | uncharacterized LOC105371622 | -1.56 | 10.576 |
| 105371622 | LOC105371622 | CRYZL2P-SEC16B readthrough | -1.883 | 10.458 |
| 111240474 | CRYZL2P-SEC16B | SEC16 homolog B, endoplasmic reticulum export factor | -1.845 | 4.015 |
| 89866 | SEC16B | crystallin zeta like 2, pseudogene | -2.092 | 2.827 |
| 730102 | CRYZL2P | RAS protein activator like 2 | -1.358 | 7.586 |
| 9462 | RASAL2 | RALGPS2 antisense RNA 1 | -1.976 | 3.391 |
| 646976 | RALGPS2-AS1 | Ral GEF with PH domain and SH3 binding motif 2 | 1.652 | 4.22 |
| 55103 | RALGPS2 | FAM20B glycosaminoglycan xylosylkinase | 1.186 | 2.802 |
| 9917 | FAM20B | torsin family 3 member A | -0.785 | 2.008 |
| 64222 | TOR3A | ABL proto-oncogene 2, non-receptor tyrosine kinase | -0.768 | 3.062 |
| 27 | ABL2 | sterol O-acyltransferase 1 | -1.399 | 4.458 |
| 6646 | SOAT1 | torsin 1A interacting protein 2 | -1.652 | 9.819 |
| 163590 | TOR1AIP2 | torsin 1A interacting protein 1 | 0.983 | 3.376 |
| 26092 | TOR1AIP1 | uncharacterized LOC101928933 | 1.307 | 7.42 |
| 101928933 | LOC101928933 | uncharacterized LOC105371636 | 1.861 | 1.972 |
| 105371636 | LOC105371636 | uncharacterized LOC105371636 | 1.91 | 2.824 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 5768 | QSOX1 | quiescin sulfhydryl oxidase 1 | 1.309 | 12.719 |
| 9213 | XPR1 | xenotropic and polytropic retrovirus receptor 1 | -0.936 | 7.161 |
| 57710 | KIAA1614 | KIAA1614 | -1.184 | 1.996 |
| 10228 | STX6 | syntaxin 6 | -0.633 | 1.854 |
| 3140 | MR1 | major histocompatibility complex, class I-related | -0.493 | 2.298 |
| 51278 | IER5 | immediate early response 5 | -1.517 | 3.694 |
| 777 | CACNA1E | calcium voltage-gated channel subunit alpha1 E | 3.182 | 3.54 |
| 3915 | LAMC1 | laminin subunit gamma 1 | 1.95 | 2.47 |
| 10092 | ARPC5 | actin related protein 2/3 complex subunit 5 | 0.84 | 2.533 |
| 23179 | RGL1 | ral guanine nucleotide dissociation stimulator like 1 | -2.236 | 2.131 |
| 80267 | EDEM3 | ER degradation enhancing alpha-mannosidase like protein 3 | 0.474 | 1.363 |
| 116496 | NIBAN1 | riban apoptosis regulator 1 | 1.237 | 1.526 |
| 6045 | RNF2 | ring finger protein 2 | -0.694 | 2.654 |
| 54823 | SWT1 | SWT1 RNA endoribonuclease homolog | 0.774 | 1.718 |
| 10625 | IVNS1ABP | influenza virus NS1A binding protein | 1.874 | 5.716 |
| 5321 | PLA2G4A | phospholipase A2 group IVA | 0.746 | 1.653 |
| 5996 | RGS1 | regulator of G protein signaling 1 | -2.664 | 4.905 |
| 6738 | RO60 | Ro60, Y RNA binding protein | 0.613 | 1.72 |
| 51022 | GLRX2 | glutaredoxin 2 | 0.786 | 2.14 |
| 259266 | ASPM | assembly factor for spindle microtubules | 2.982 | 1.419 |
| 360023 | ZBTB41 | zinc finger and BTB domain containing 41 | -0.687 | 1.446 |
| 5788 | PTPRC | protein tyrosine phosphatase receptor type C | -0.836 | 1.652 |
| 23528 | ZNF281 | zinc finger protein 281 | 1.237 | 3.663 |
| 9928 | KIF14 | kinesin family member 14 | 2.789 | 2.283 |
| 83479 | DDX59 | DEAD-box helicase 59 | 0.447 | 2.05 |
| 23271 | CAMSAP2 | calmodulin regulated spectrin associated protein family member 2 | -3.356 | 12.478 |
| 23046 | KIF21B | kinesin family member 21B | 2.396 | 10.412 |
| 252839 | TMEM9 | transmembrane protein 9 | -0.883 | 1.359 |
| 89796 | NAV1 | neuron navigator 1 | -1.441 | 1.391 |
| 55705 | IPO9 | importin 9 | -0.512 | 2.163 |
| 149345 | SHISA4 | shisa family member 4 | -3.083 | 7.015 |
| 6051 | RNPEP | arginyl aminopeptidase | -0.823 | 1.941 |
| 102723465 | ELF3-AS1 | ELF3 antisense RNA 1 | -1.03 | 1.773 |
| 1999 | ELF3 | E74 like ETS transcription factor 3 | -1.857 | 4.813 |
| 127829 | ARL8A | ADP ribosylation factor like GTPase 8A | 0.651 | 1.648 |
| 5778 | PTPN7 | protein tyrosine phosphatase non-receptor type 7 | 2.323 | 5.656 |
| 148713 | PTPRVP | protein tyrosine phosphatase receptor type V, pseudogene | 1.897 | 2.841 |
| 29089 | UBE2T | ubiquitin conjugating enzyme E2 T | 2.864 | 3.044 |
| 4660 | PPP1R12B | protein phosphatase 1 regulatory subunit 12B | 1.499 | 7.129 |
| 127833 | SYT2 | synaptotagmin 2 | 1.557 | 2.471 |
| 105371686 | LOC105371686 | | 1.829 | 1.887 |
| 10765 | KDM5B | lysine demethylase 5B | 1.473 | 7.155 |
| 148709 | ACTG1P25 | actin gamma 1 pseudogene 25 | 1.954 | 3.181 |
| 5877 | RABIF | RAB interacting factor | 0.573 | 3.032 |
| 59349 | KLHL12 | kelch like family member 12 | 0.392 | 1.406 |
| 92703 | TMEM183A | transmembrane protein 183A | 0.758 | 3.46 |
| 8497 | PPFIA4 | PTPRF interacting protein alpha 4 | 1.444 | 1.613 |
| 105371687 | LOC105371687 | uncharacterized LOC105371687 | -1.884 | 1.736 |
| 1116 | CHI3L1 | chitinase 3 like 1 | 3.15 | 1.498 |
| 1118 | CHIT1 | chitinase 1 | 3.182 | 1.449 |
| 730227 | BTG2-DT | BTG2 divergent transcript | 1.265 | 1.692 |
| 84919 | PPP1R15B | protein phosphatase 1 regulatory subunit 15B | 0.642 | 1.748 |
| 23114 | NFASC | neurofascin | 4.107 | 4.516 |
| 5929 | RBBP5 | RB binding protein 5, histone lysine methyltransferase complex subunit | 0.65 | 2.1 |
| 25778 | DSTYK | dual serine/threonine and tyrosine protein kinase | 0.799 | 4.206 |
| 9911 | TMCC2 | transmembrane and coiled-coil domain family 2 | -1.853 | 1.696 |
| 5129 | CDK18 | cyclin dependent kinase 18 | -4.66 | 6.196 |
| 2005 | ELK4 | ETS transcription factor ELK4 | -1.298 | 13.609 |
| 254428 | SLC41A1 | solute carrier family 41 member 1 | -2.5 | 4.1 |
| 284581 | LOC284581 | uncharacterized LOC284581 | -4.345 | 3.462 |
| 23380 | SRGAP2 | SLIT-ROBO Rho GTPase activating protein 2 | -1.026 | 2.834 |
| 9641 | IKBKE | inhibitor of nuclear factor kappa B kinase subunit epsilon | -1.546 | 9.476 |
| 8444 | DYRK3 | dual specificity tyrosine phosphorylation regulated kinase 3 | 2.665 | 1.991 |
| 9261 | MAPKAPK2 | MAPK activated protein kinase 2 | 0.836 | 3.835 |
| 9214 | FCMR | Fc mu receptor | -2.631 | 1.837 |
| 55432 | YOD1 | YOD1 deubiquitinase | 1.61 | 6.421 |
| 5208 | PFKFB2 | 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2 | 3.489 | 12.182 |
| 101930114 | HSD11B1-AS1 | HSD11B1 antisense RNA 1 | 1.978 | 1.64 |
| 50486 | GOS2 | G0/G1 switch 2 | 2.393 | 2.566 |
| 80342 | TRAF3IP3 | TRAF3 interacting protein 3 | -0.729 | 3.061 |
| 148304 | C1orf74 | chromosome 1 open reading frame 74 | -0.54 | 1.92 |
| 3664 | IRF6 | interferon regulatory factor 6 | 2.307 | 1.863 |
| 27042 | UTP25 | UTP25 small subunit processome component | -1.057 | 1.446 |
| 55733 | HHAT | hedgehog acyltransferase | -2.027 | 4.027 |
| 7188 | TRAF5 | TNF receptor associated factor 5 | -2.673 | 11.151 |
| 7779 | SLC30A1 | solute carrier family 30 member 1 | -0.945 | 1.727 |
| 4751 | NEK2 | NIMA related kinase 2 | 3.186 | 2.873 |
| 9926 | LPGAT1 | lysophosphatidylglycerol acyltransferase 1 | 1.206 | 12.694 |
| 102723727 | LPGAT1-AS1 | LPGAT1 antisense RNA 1 | 1.693 | 1.836 |
| 51514 | DTL | denticleless E3 ubiquitin protein ligase homolog | 3.395 | 1.58 |
| 5525 | PPP2R5A | protein phosphatase 2 regulatory subunit B'alpha | 1.544 | 7.742 |
| 692157 | SNORA16B | small nucleolar RNA, H/ACA box 16B | 2.095 | 2.299 |
| 55248 | PACC1 | proton activated chloride channel 1 | -1.823 | 7.121 |
| 29937 | NENF | neudefin neurotrophic factor | -1.406 | 10.296 |
| 467 | ATF3 | activating transcription factor 3 | -3.032 | 7.976 |
| 102723761 | LINC02773 | long intergenic non-protein coding RNA 2773 | -2.811 | 7.841 |
| 55509 | BATF3 | basic leucine zipper ATF-like transcription factor 3 | -1.947 | 3.672 |
| 128387 | TATDN3 | TatD DNase domain containing 3 | -0.633 | 3.053 |
| 642946 | FLVCR1-DT | FLVCR1 divergent transcript | 1.193 | 1.739 |
| 28982 | FLVCR1 | FLVCR heme transporter 1 | 1.825 | 2.731 |
| 26750 | RPS6KC1 | ribosomal protein S6 kinase C1 | -1.37 | 12.171 |
| 1063 | CENPF | centromere protein F | 3.142 | 3.262 |
| 55105 | GPATCH2 | G-patch domain containing 2 | -0.987 | 3.08 |
| 51018 | RRP15 | ribosomal RNA processing 15 homolog | -0.766 | 1.573 |
| 54996 | MTARC2 | mitochondrial amidoxime reducing component 2 | 2.878 | 5.983 |
| 64757 | MTARC1 | mitochondrial amidoxime reducing component 1 | 1.82 | 9.318 |
| 100873924 | HLX-AS1 | HLX antisense RNA 1 | 2.072 | 7.068 |
| 3142 | HLX | H2.0 like homeobox | 2.283 | 7.393 |
| 105372956 | LOC105372956 | uncharacterized LOC105372956 | 0.961 | 1.451 |
| 79802 | HHIPL2 | HHIP like 2 | 0.912 | 1.726 |
| 375056 | MIA3 | MIA SH3 domain ER export factor 3 | -0.619 | 3.649 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 64853 | AIDA | axin interactor, dorsalization associated | -1.235 | 9.027 |
| 84976 | DISP1 | dispatched RND transporter family member 1 | -1.514 | 2.507 |
| 7100 | TLR5 | toll like receptor 5 | -1.511 | 3.087 |
| 824 | CAPN2 | calpain 2 | -2.189 | 19.364 |
| 441124 | GTF2IP20 | general transcription factor Ili pseudogene 20 | 0.836 | 2.847 |
| 8560 | DEGS1 | delta 4-desaturase, sphingolipid 1 | 1.056 | 5.413 |
| 3930 | LBR | lamin B receptor | 1.393 | 12.853 |
| 6726 | SRP9 | signal recognition particle 9 | 0.84 | 2.138 |
| 2052 | EPHX1 | epoxide hydrolase 1 | 0.995 | 7.132 |
| 9725 | TMEM63A | transmembrane protein 63A | 1.831 | 6.674 |
| 29920 | PYCR2 | pyrrolidine-5-carboxylate reductase 2 | 0.65 | 2.258 |
| 3020 | H3-3A | H3.3 histone A | 0.735 | 3.368 |
| 286826 | LIN9 | lin-9 DREAM MuvB core complex component | 1.351 | 1.504 |
| 142 | PARP1 | poly(ADP-ribose) polymerase 1 | -1.366 | 11.67 |
| 5664 | PSEN2 | presenilin 2 | -2.163 | 8.789 |
| 339500 | ZNF678 | zinc finger protein 678 | -1.583 | 2.918 |
| 116841 | SNAP47 | synaptosome associated protein 47 | -0.687 | 3.205 |
| 84033 | OBSCN | obscurin, cytoskeletal calmodulin and titin-interacting RhoGEF | -4.365 | 8.56 |
| 149603 | RNF187 | ring finger protein 187 | -1.437 | 13.011 |
| 105373143 | LOC105373143 | uncharacterized LOC105373143 | 3.454 | 3.703 |
| 5867 | RAB4A | RAB4A, member RAS oncogene family | -1.545 | 2.833 |
| 23456 | ABCB10 | ATP binding cassette subfamily B member 10 | 0.663 | 1.886 |
| 22796 | COG2 | component of oligomeric golgi complex 2 | -1.057 | 5.88 |
| 107985358 | LOC107985358 | uncharacterized LOC107985358 | -1.258 | 1.616 |
| 84886 | C1orf198 | chromosome 1 open reading frame 198 | -1.815 | 3.139 |
| 149371 | EXOC8 | exocyst complex component 8 | 0.717 | 2.518 |
| 83932 | SPRTN | SprT-like N-terminal domain | 0.821 | 1.679 |
| 54583 | EGLN1 | egl-9 family hypoxia inducible factor 1 | 0.882 | 2.63 |
| 100303453 | TSNAX-DISC1 | TSNAX-DISC1 readthrough (NMD candidate) | -0.636 | 1.511 |
| 27185 | DISC1 | DISC1 scaffold protein | -1.307 | 3.153 |
| 105373170 | LOC105373170 | uncharacterized LOC105373170 | -1.662 | 1.818 |
| 84284 | NTPCR | nucleoside-triphosphatase, cancer-related | -0.78 | 2.134 |
| 80003 | PCNX2 | pecanex 2 | -3.082 | 11.176 |
| 359948 | IRF2BP2 | interferon regulatory factor 2 binding protein 2 | 0.565 | 1.574 |
| 105373211 | LOC105373211 | | 1.795 | 3.531 |
| 101927851 | LNCATV | lncRNA negative regulator of antiviral signaling | 2.29 | 6.237 |
| 107985366 | LOC107985366 | | 1.356 | 1.607 |
| 4811 | NID1 | nidogen 1 | -3.833 | 11.251 |
| 7107 | GPR137B | G protein-coupled receptor 137B | -1.571 | 4.034 |
| 56605 | ERO1B | endoplasmic reticulum oxidoreductase 1 beta | -0.841 | 2.36 |
| 3964 | LGALS8 | galectin 8 | -0.464 | 2.187 |
| 4548 | MTR | 5-methyltetrahydrofolate-homocysteine methyltransferase | -0.578 | 3.388 |
| 8564 | KMO | kyurenine 3-monooxygenase | -1.944 | 17.085 |
| 23596 | OPN3 | opsin 3 | -0.967 | 4.598 |
| 9156 | EXO1 | exonuclease 1 | 3.395 | 3.057 |
| 731275 | LINC01347 | long intergenic non-protein coding RNA 1347 | 0.75 | 1.676 |
| 10806 | SDCCAG8 | SHH signaling and ciliogenesis regulator SDCCAG8 | -0.421 | 1.618 |
| 10000 | AKT3 | AKT serine/threonine kinase 3 | -1.846 | 4.753 |
| 200159 | C1orf100 | chromosome 1 open reading frame 100 | 2.921 | 5.202 |
| 159 | ADSS2 | adenylosuccinate synthase 2 | 1.853 | 6.42 |
| 105373264 | LOC105373264 | | 1.481 | 1.997 |
| 257044 | CATSPERE | catspers channel auxiliary subunit epsilon | 2.629 | 5.846 |
| 112268258 | LOC112268258 | | -1.846 | 2.247 |
| 7678 | ZNF124 | zinc finger protein 124 | -1.226 | 2.696 |
| 84838 | ZNF496 | zinc finger protein 496 | -2.232 | 10.402 |
| 107985115 | ZNF496-DT | ZNF496 divergent transcript | -2.008 | 2.124 |
| 114548 | NLRP3 | NLR family pyrin domain containing 3 | -1.862 | 4.688 |
| 343171 | OR2W3 | olfactory receptor family 2 subfamily W member 3 | -2.728 | 2.454 |
| 646627 | LYPD8 | LY6/PLAUR domain containing 8 | 2.325 | 1.918 |
| 107985747 | LOC107985747 | uncharacterized LOC107985747 | 3.316 | 3.056 |
| 80851 | SH3BP5L | SH3 binding domain protein 5 like | 0.896 | 3.616 |
| 55657 | ZNF692 | zinc finger protein 692 | 0.509 | 1.583 |
| 105379524 | LOC105379524 | uncharacterized LOC105379524 | 1.937 | 1.973 |
| 51112 | TRAPPC12 | trafficking protein particle complex subunit 12 | -0.545 | 2.388 |
| 104326052 | NRIR | negative regulator of interferon response | -4.253 | 5.342 |
| 129607 | CMPK2 | cytidine/uridine monophosphate kinase 2 | -3.212 | 3.88 |
| 91543 | RSAD2 | radical S-adenosyl methionine domain containing 2 | -4.018 | 2.427 |
| 9781 | RNF144A | ring finger protein 144A | 2.048 | 4.688 |
| 101929567 | LINC01814 | long intergenic non-protein coding RNA 1814 | 2.014 | 3.165 |
| 129642 | MBOAT2 | membrane bound O-acyltransferase domain containing 2 | 3.06 | 6.584 |
| 9270 | ITGB1BP1 | integrin subunit beta 1 binding protein 1 | 0.623 | 1.457 |
| 9014 | TAF1B | TATA-box binding protein associated factor, RNA polymerase I subunit B | -1.409 | 6.822 |
| 105373422 | LOC105373422 | uncharacterized LOC105373422 | -3.462 | 3.558 |
| 29841 | GRHL1 | grainyhead like transcription factor 1 | 2.136 | 2.142 |
| 112268412 | LOC112268412 | uncharacterized LOC112268412 | -2.842 | 10.255 |
| 101929882 | KLF11-DT | KLF11 divergent transcript | -2.811 | 5.478 |
| 8462 | KLF11 | KLF transcription factor 11 | -1.698 | 5.576 |
| 6241 | RRM2 | ribonucleotide reductase regulatory subunit M2 | 3.175 | 1.417 |
| 105373424 | LOC105373424 | uncharacterized LOC105373424 | 2.784 | 2.324 |
| 3241 | HPCAL1 | hippocalcin like 1 | -0.936 | 6.754 |
| 4953 | ODC1 | ornithine decarboxylase 1 | -0.667 | 1.631 |
| 130814 | SLC66A3 | solute carrier family 66 member 3 | -1.367 | 4.09 |
| 1876 | E2F6 | E2F transcription factor 6 | -0.815 | 2.558 |
| 23175 | LPIN1 | lipin 1 | -2.611 | 8.769 |
| 28951 | TRIB2 | tribbles pseudokinase 2 | -2.125 | 3.43 |
| 81553 | CYRIA | CYFIP related Rac1 interactor A | -2.355 | 16.613 |
| 348654 | GEN1 | GEN1 Holliday junction 5' flap endonuclease | 1.388 | 1.855 |
| 100526794 | NT5C1B-RDH14 | NT5C1B-RDH14 readthrough | -1.051 | 1.591 |
| 57665 | RDH14 | retinol dehydrogenase 14 | -1.085 | 1.75 |
| 400946 | LINC00954 | long intergenic non-protein coding RNA 954 | -1.775 | 2.383 |
| 130502 | TTC32 | tetratricopeptide repeat domain 32 | 0.953 | 3.345 |
| 9741 | LAPTM4A | lysosomal protein transmembrane 4 alpha | -0.948 | 5.626 |
| 105373465 | LOC105373465 | uncharacterized LOC105373465 | -2.55 | 1.962 |
| 388 | RHOB | ras homolog family member B | -2.786 | 12.667 |
| 165324 | UBXN2A | UBX domain protein 2A | -0.998 | 3.22 |
| 51639 | SF3B6 | splicing factor 3b subunit 6 | 0.713 | 4.257 |
| 375190 | FAM228B | family with sequence similarity 228 member B | 1.637 | 6.808 |
| 9540 | TP53I3 | tumor protein p53 inducible protein 3 | 2.145 | 8.104 |
| 79172 | CENPO | centromere protein O | 1.526 | 4.743 |
| 109 | ADCY3 | adenylate cyclase 3 | 1.362 | 2.888 |
| 5443 | POMC | propiomelanocortin | -1.668 | 1.941 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 1788 | DNMT3A | DNA methyltransferase 3 alpha | -0.899 | 2.29 |
| 1838 | DTNB | dystrobrevin beta | 0.66 | 1.819 |
| 3797 | KIF3C | kinesin family member 3C | 1.727 | 3.879 |
| 3032 | HADHB | hydroxyacyl-CoA dehydrogenase trifunctional multienzyme complex subunit beta | -0.406 | 1.4 |
| 105374334 | LOC105374334 | uncharacterized LOC105374334 | -1.769 | 2.121 |
| 92749 | DRC1 | dynein regulatory complex subunit 1 | 3.41 | 6.707 |
| 9381 | OTOF | otoferlin | -9.158 | 3.877 |
| 54978 | SLC35F6 | solute carrier family 35 member F6 | -1.304 | 3.935 |
| 1058 | CENPA | centromere protein A | 3.133 | 3.396 |
| 60509 | AGBL5 | AGBL carboxypeptidase 5 | 0.524 | 2.374 |
| 8884 | SLC5A6 | solute carrier family 5 member 6 | -0.628 | 2.047 |
| 4358 | MPV17 | mitochondrial inner membrane protein MPV17 | -0.444 | 1.512 |
| 2498 | FTH1P3 | ferritin heavy chain 1 pseudogene 3 | -1.368 | 2.221 |
| 29959 | NRBP1 | nuclear receptor binding protein 1 | 0.484 | 1.419 |
| 26160 | IFT172 | intraflagellar transport 172 | -1.091 | 2.39 |
| 151056 | PLB1 | phospholipase B1 | 0.862 | 7.022 |
| 79745 | CLIP4 | CAP-Gly domain containing linker protein family member 4 | -2.682 | 6.138 |
| 51646 | YPEL5 | yippee like 5 | 1.002 | 3.155 |
| 253558 | LCLAT1 | lysocardiolipin acyltransferase 1 | 1.228 | 2.042 |
| 79623 | GALNT14 | polypeptide N-acetyl/galactosaminyltransferase 14 | 3.078 | 2.528 |
| 51072 | MEMO1 | mediator of cell motility 1 | 0.601 | 4.252 |
| 55676 | SLC30A6 | solute carrier family 30 member 6 | 0.752 | 1.589 |
| 58484 | NLRC4 | NLR family CARD domain containing 4 | 1.284 | 3.603 |
| 57448 | BIRC6 | baculoviral IAP repeat containing 6 | -0.474 | 2.226 |
| 55622 | TTC27 | tetratricopeptide repeat domain 27 | -0.783 | 1.341 |
| 25780 | RASGRP3 | RAS guanyl releasing protein 3 | -2.79 | 8.556 |
| 51232 | CRIM1 | cysteine rich transmembrane BMP regulator 1 | 0.697 | 1.704 |
| 5212 | VIT | vitrin | 3.252 | 1.74 |
| 6801 | STRN | striatin | 0.612 | 1.745 |
| 54497 | HEATR5B | HEAT repeat containing 5B | 0.884 | 5.054 |
| 253635 | GPATCH11 | G-patch domain containing 11 | 0.811 | 1.856 |
| 100505876 | CEBPZOS | CEBPZ opposite strand | 0.902 | 3.589 |
| 23683 | PRKD3 | protein kinase D3 | -0.977 | 3.714 |
| 25797 | QPCT | glutaminyl-peptide cyclotransferase | 1.72 | 8.806 |
| 92906 | HNRNPLL | heterogeneous nuclear ribonucleoprotein L like | 2.054 | 5.954 |
| 79833 | GEMIN6 | gem nuclear organelle associated protein 6 | -1.719 | 4.972 |
| 90957 | DHX57 | DExH-box helicase 57 | -1.354 | 4.774 |
| 729967 | MORN2 | MORN repeat containing 2 | -1.365 | 1.676 |
| 8491 | MAP4K3 | mitogen-activated protein kinase kinase kinase kinase 3 | -1.281 | 7.459 |
| 728730 | MAP4K3-DT | MAP4K3 divergent transcript | -1.241 | 1.415 |
| 6546 | SLC8A1 | solute carrier family 8 member A1 | -1.314 | 1.919 |
| 27436 | EML4 | EMAP like 4 | 1 | 3.419 |
| 107985873 | LOC107985873 | cytochrome c oxidase subunit 7A2 like | 0.765 | 1.429 |
| 9167 | COX7A2L | oxoeicosanoid receptor 1 | 1.361 | 11.423 |
| 165140 | OXER1 | 3-hydroxyanthranilate 3,4-dioxygenase | 1.109 | 1.897 |
| 23498 | HAAO | ZFP36 ring finger protein like 2 | -1.354 | 3.32 |
| 678 | ZFP36L2 | leucine rich pentatricopeptide repeat containing | -0.762 | 2.533 |
| 10128 | LRPPRC | uncharacterized LOC102723904 | -1.025 | 2.971 |
| 102723904 | LOC102723904 | protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1B | 0.942 | 2.121 |
| 5495 | PPM1B | calmodulin-lysine N-methyltransferase | 0.941 | 7.405 |
| 79823 | CAMKMT | protein kinase C epsilon | 0.655 | 1.302 |
| 5581 | PRKCE | endothelial PAS domain protein 1 | -1.064 | 2.269 |
| 2034 | EPAS1 | ATPase H ⁺ transporting V1 subunit E2 | 1.372 | 1.66 |
| 90423 | ATP6V1E2 | ras homolog family member Q | -0.829 | 2.038 |
| 23433 | RHOQ | RHOQ antisense RNA 1 | -1.237 | 10.63 |
| 100506142 | RHOQ-AS1 | phosphatidylinositol glycan anchor biosynthesis class F | -1.468 | 3.248 |
| 5281 | PIGF | CXXC repeat containing interactor of PDZ3 domain | -0.985 | 6.175 |
| 9419 | CRIPT | suppressor of cytokine signaling 5 | 0.717 | 3.157 |
| 9655 | SOCS5 | tetratricopeptide repeat domain 7A | 1.312 | 3.479 |
| 57217 | TTC7A | calmodulin 2 | -1.313 | 8.593 |
| 805 | CALM2 | uncharacterized LOC105374591 | -0.955 | 4.736 |
| 105374591 | LOC105374591 | uncharacterized LOC105374593 | 3.152 | 4.807 |
| 105374593 | LOC105374593 | forkhead box N2 | 3.338 | 3.093 |
| 3344 | FOXN2 | protein phosphatase 1 regulatory subunit 21 | 1.039 | 2.721 |
| 129285 | PPP1R21 | spectrin beta, non-erythrocytic 1 | 0.466 | 2.566 |
| 6711 | SPTBN1 | reticulin 4 | 2.201 | 6.605 |
| 57142 | RTN4 | prolyl-tRNA synthetase associated domain containing 1, pseudogene | 0.578 | 2.425 |
| 344405 | PRORSD1P | coiled-coil domain containing 88A | 1.302 | 3.213 |
| 55704 | CCDC88A | polyribonucleotide nucleotidyltransferase 1 | -1.079 | 13.274 |
| 87178 | PNPT1 | VRK serine/threonine kinase 2 | -2.118 | 4.047 |
| 7444 | VRK2 | BCL11 transcription factor A | -0.791 | 1.598 |
| 53335 | BCL11A | REL proto-oncogene, NF- κ B subunit | -0.706 | 1.49 |
| 5966 | REL | chromosome 2 open reading frame 74 | -0.808 | 3.713 |
| 339804 | C2orf74 | UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 2 | -1.288 | 1.448 |
| 10678 | B3GNT2 | UDP-glucose pyrophosphorylase 2 | 1.022 | 2.536 |
| 7360 | UGP2 | VPS54 subunit of GARP complex | 1.298 | 3.711 |
| 51542 | VPS54 | LGALSL divergent transcript | 1.159 | 3.674 |
| 105374771 | LGALSL-DT | galectin like | 2.426 | 3.378 |
| 29094 | LGALSL | SERTA domain containing 2 | 2.6 | 4.296 |
| 9792 | SERTAD2 | uncharacterized LOC105374775 | 1.122 | 4.471 |
| 105374775 | LOC105374775 | solute carrier family 1 member 4 | 1.431 | 3.11 |
| 107984063 | LOC107984063 | RAB1A, member RAS oncogene family | -2.737 | 5.243 |
| 6509 | SLC1A4 | protein phosphatase 3 regulatory subunit B, alpha | 1.265 | 1.585 |
| 5861 | RAB1A | Rho GTPase activating protein 25 | 0.701 | 1.597 |
| 5534 | PPP3R1 | uncharacterized LOC105374790 | 0.513 | 2.365 |
| 9938 | ARHGAP25 | glutamine-fructose-6-phosphate transaminase 1 | 0.678 | 1.541 |
| 105374790 | LOC105374790 | NFU1 iron-sulfur cluster scaffold | -0.853 | 1.546 |
| 2673 | GFPT1 | annexin A4 | 0.593 | 1.612 |
| 27247 | NFU1 | germ cell-less 1, spermatogenesis associated | 1.109 | 3.812 |
| 307 | ANXA4 | transforming growth factor alpha | 1.133 | 3.919 |
| 64395 | GMCL1 | adducin 2 | 1.355 | 4.47 |
| 7039 | TGFA | C-type lectin domain family 4 member F | 1.999 | 3.142 |
| 119 | ADD2 | N-acetylglucosamine kinase | -7.452 | 9.037 |
| 165530 | CLEC4F | poly(A) binding protein interacting protein 2B | -7.398 | 5.25 |
| 55577 | NAGK | dysferlin | -1.585 | 9.208 |
| 400961 | PAIP2B | exocyst complex component 6B | -1.446 | 3.651 |
| 8291 | DYSF | sepiapterin reductase | 1.614 | 4.91 |
| 23233 | EXOC6B | sideroflexin 5 | -2.24 | 7.683 |
| 6697 | SPR | uncharacterized LOC107985897 | -1.904 | 3.207 |
| 94097 | SFXN5 | sideroflexin 5 | 1.138 | 8.631 |
| 107985897 | LOC107985897 | uncharacterized LOC107985897 | 1.129 | 2.552 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 105374800 | LOC105374800 | uncharacterized LOC105374800 | 1.488 | 2.286 |
| 10322 | SMYD5 | SMYD family member 5 | -1.005 | 3.407 |
| 10574 | CCT7 | chaperonin containing TCP1 subunit 7 | -0.66 | 3.108 |
| 150726 | FBXO41 | F-box protein 41 | -2.591 | 11.848 |
| 51471 | NAT8B | N-acetyltransferase 8B (putative, gene/pseudogene) | -2.276 | 3.094 |
| 51002 | TPRKB | TP53RK binding protein | 0.66 | 1.378 |
| 200424 | TET3 | tet methylcytosine dioxygenase 3 | -0.582 | 1.962 |
| 10797 | MTHFD2 | methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, methenyltetrahydrofolate cyclohydrolase | -0.98 | 2.596 |
| 388963 | C2orf81 | chromosome 2 open reading frame 81 | -2.314 | 2.257 |
| 84058 | WDR54 | WD repeat domain 54 | -1.713 | 2.37 |
| 23559 | WBP1 | WW domain binding protein 1 | 0.428 | 1.441 |
| 64427 | TTC31 | tetratricopeptide repeat domain 31 | 0.502 | 2.108 |
| 151534 | LBX2-AS1 | LBX2 antisense RNA 1 | -1.993 | 6.485 |
| 27429 | HTRA2 | HtrA serine peptidase 2 | 0.883 | 9.533 |
| 84695 | LOXL3 | lysyl oxidase like 3 | 0.796 | 4.02 |
| 1796 | DOK1 | docking protein 1 | 0.478 | 1.785 |
| 130951 | M1AP | meiosis 1 associated protein | 2.506 | 7.164 |
| 10505 | SEMA4F | semaphorin 4F | -2.199 | 2.984 |
| 6936 | GCF2 | GC-rich sequence DNA-binding factor 2 | -0.635 | 1.494 |
| 8802 | SUCLG1 | succinate-CoA ligase GDP/ADP-forming subunit alpha | 0.714 | 5.28 |
| 129293 | TRABD2A | TrkB domain containing 2A | -5.017 | 6.239 |
| 105374836 | LOC105374836 | uncharacterized LOC105374836 | -1.514 | 7.927 |
| 9168 | TMSB10 | thymosin beta 10 | -1.577 | 17.005 |
| 83439 | TCF7L1 | transcription factor 7 like 1 | 0.851 | 1.344 |
| 100996506 | LOC100996506 | ELMO domain containing 3 | 1.039 | 4.015 |
| 84173 | ELMOD3 | promoter of MAT2A antisense radiation-induced circulating long non-coding RNA | 0.382 | 1.892 |
| 100630918 | PARTICL | vesicle associated membrane protein 5 | 0.757 | 1.773 |
| 10791 | VAMP5 | transmembrane protein 150A | -1.654 | 4.822 |
| 129303 | TMEM150A | chromosome 2 open reading frame 68 | -1.804 | 3.621 |
| 388969 | C2orf68 | ST3 beta-galactoside alpha-2,3-sialyltransferase 5 | 0.77 | 4.172 |
| 8869 | ST3GAL5 | ST3GAL5 antisense RNA 1 (head to head) | -3.533 | 20.133 |
| 101928113 | ST3GAL5-AS1 | uncharacterized LOC105374843 | -5.983 | 5.789 |
| 112268420 | LOC112268420 | RNA polymerase I subunit A | -4.674 | 5.043 |
| 105374843 | LOC105374843 | inner membrane mitochondrial protein | -1.218 | 6.654 |
| 25885 | POLR1A | lysine demethylase 3A | -0.494 | 1.4 |
| 10989 | IMMT | RNF103-CHMP3 readthrough | 0.894 | 3.398 |
| 55818 | KDM3A | charged multivesicular body protein 3 | 0.628 | 3.999 |
| 100526767 | RNF103-CHMP3 | CHMP3 and RNF103 antisense RNA 1 | 0.546 | 2.742 |
| 51652 | CHMP3 | ring finger protein 103 | 1.518 | 4.301 |
| 105374845 | CHMP3-AS1 | long intergenic non-protein coding RNA 1943 | 1.419 | 4.964 |
| 7844 | RNF103 | uncharacterized LOC105374852 | 1.148 | 1.95 |
| 101928173 | LINC01943 | lysine rich coiled-coil 1 | 3.124 | 3.887 |
| 105374852 | LOC105374852 | ribose 5-phosphate isomerase A | 0.658 | 1.888 |
| 51315 | KRCC1 | immunoglobulin kappa constant | 1.44 | 7.215 |
| 22934 | RPIA | immunoglobulin kappa joining 1 | -2.606 | 7.609 |
| 3514 | IGKC | immunoglobulin kappa variable 4-1 | -2.788 | 1.977 |
| 28950 | IGKJ1 | immunoglobulin kappa variable 1-5 | -2.706 | 3.307 |
| 28908 | IGKV4-1 | immunoglobulin kappa variable 3-11 | -2.282 | 1.458 |
| 28299 | IGKV1-5 | immunoglobulin kappa variable 3-15 | -4.814 | 4.365 |
| 28914 | IGKV3-11 | immunoglobulin kappa variable 3-20 | -3.002 | 2.481 |
| 28913 | IGKV3-15 | immunoglobulin kappa variable 1-39 | -1.911 | 1.407 |
| 28912 | IGKV3-20 | immunoglobulin kappa variable 1D-39 | -2.569 | 3.225 |
| 28930 | IGKV1-39 | immunoglobulin kappa variable 1D-39 | -2.12 | 2.438 |
| 28893 | IGKV1D-39 | gamma-glutamyltransferase 8 pseudogene | -2.388 | 1.826 |
| 645367 | GGT8P | mal, T cell differentiation protein | -4.521 | 2.98 |
| 4118 | MAL | long intergenic non-protein coding RNA 342 | 1.797 | 3.369 |
| 150759 | LINC00342 | ankyrin repeat domain 36C | 1.715 | 2.631 |
| 400986 | ANKRD36C | astacin like metalloendopeptidase | -3.027 | 3.149 |
| 431705 | ASTL | dual specificity phosphatase 2 | -1.791 | 1.38 |
| 1844 | DUSP2 | StAR related lipid transfer domain containing 7 | -0.836 | 4.452 |
| 56910 | STARD7 | cytosolic iron-sulfur assembly component 1 | -0.481 | 2.535 |
| 9391 | CIAO1 | non-SMC condensin I complex subunit H | 3.003 | 3.831 |
| 23397 | NCAPH | lectin, mannose binding 2 like | -0.938 | 1.337 |
| 81562 | LMAN2L | cyclin and CBS domain divalent metal cation transport mediator 4 | -1.717 | 10.894 |
| 26504 | CNNM4 | semaphorin 4C | -1.644 | 1.597 |
| 54910 | SEMA4C | ankyrin repeat domain 36 | 1.915 | 4.588 |
| 375248 | ANKRD36 | uncharacterized LOC100506076 | 1.597 | 2.091 |
| 100506076 | LOC100506076 | atherosclerotic plaque pathogenesis associated transcript | 1.551 | 2.054 |
| 100506123 | APPAT | ankyrin repeat domain 36B | 2.029 | 4.301 |
| 57730 | ANKRD36B | actin related protein 1B | 0.826 | 2.83 |
| 10120 | ACTR1B | chromosome 2 open reading frame 92 | 0.997 | 2.227 |
| 728537 | C2orf92 | inositol polyphosphate-4-phosphatase type I A | -0.538 | 2.437 |
| 3631 | INPP4A | alpha-1,3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase A | 1.779 | 6.033 |
| 11320 | MGAT4A | uncharacterized LOC107985922 | 2.764 | 4.393 |
| 107985922 | LOC107985922 | CRACD like | 2.28 | 1.968 |
| 343990 | CRACDL | testis specific 10 | 1.559 | 3.784 |
| 80705 | TSGA10 | ALF transcription elongation factor 3 | -4.877 | 18.669 |
| 3899 | AFF3 | phosducin like 3 | -5.721 | 3.606 |
| 112268421 | LOC112268421 | ribosomal protein L31 | -1.277 | 12.059 |
| 79031 | PDCL3 | regulatory factor X8 | -0.454 | 1.344 |
| 6160 | RPL31 | interleukin 1 receptor type 2 | 2.357 | 3.558 |
| 731220 | RFX8 | uncharacterized LOC107985926 | 6.922 | 24.976 |
| 7850 | IL1R2 | interleukin 1 receptor type 1 | 4.195 | 4.171 |
| 107985926 | LOC107985926 | interleukin 18 receptor 1 | 3.087 | 6.127 |
| 3554 | IL1R1 | interleukin 18 receptor accessory protein | 3.794 | 5.596 |
| 8809 | IL18R1 | microRNA 4772 | 4.296 | 9.3 |
| 8807 | IL18RAP | major facilitator superfamily domain containing 9 | 4.206 | 6.529 |
| 100616157 | MIR4772 | transforming growth factor beta receptor associated protein 1 | 2.432 | 6.9 |
| 84804 | MFSD9 | NCK adaptor protein 2 | 0.591 | 2.688 |
| 9392 | TGFBRAP1 | SH3 domain containing ring finger 3 | 0.78 | 1.657 |
| 8440 | NCK2 | septin 10 | 1.174 | 1.49 |
| 344558 | SH3RF3 | sosondowah ankyrin repeat domain family member C | -2.591 | 9.179 |
| 151011 | SEPTIN10 | RANBP2 like and GRIP domain containing 5 | -2.651 | 6.46 |
| 65124 | SOWAHC | mitoregulin | 0.861 | 1.516 |
| 84220 | RGPD5 | RANBP2 like and GRIP domain containing 6 | -1.508 | 4.244 |
| 205251 | MTLN | BUB1 mitotic checkpoint serine/threonine kinase | 0.826 | 1.423 |
| 729540 | RGPD6 | BCL2 like 11 | 2.767 | 2.729 |
| 699 | BUB1 | zinc finger CCHC-type containing 6 | -1.214 | 3.381 |
| 10018 | BCL2L11 | RANBP2 like and GRIP domain containing 8 | 0.488 | 1.491 |
| 376940 | ZC3H6 | 0.1039 | 1.91 | |
| 727851 | RGPD8 | | | |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 150465 | TTL | tubulin tyrosine ligase | -0.47 | 1.504 |
| 84172 | POLR1B | RNA polymerase I subunit B | -0.735 | 1.934 |
| 6574 | SLC20A1 | solute carrier family 20 member 1 | -0.565 | 1.343 |
| 102724955 | LOC102724955 | uncharacterized LOC102724955 | 1.783 | 2.441 |
| 284958 | NT5DC4 | 5'-nucleotidase domain containing 4 | 1.867 | 2.701 |
| 150468 | CKAP2L | cytoskeleton associated protein 2 like | 3.827 | 4.094 |
| 23550 | PSD4 | pleckstrin and Sec7 domain containing 4 | 0.56 | 1.651 |
| 150472 | ZNG1B | Zn regulated GTPase metalloprotein activator 1B | -0.95 | 2.706 |
| 112268422 | LOC112268422 | | -1.593 | 2.012 |
| 375260 | WASH2P | WASP family homolog 2, pseudogene | 0.395 | 1.479 |
| 10096 | ACTR3 | actin related protein 3 | 0.885 | 2.807 |
| 8886 | DDX18 | DEAD-box helicase 18 | -1.355 | 23.065 |
| 51141 | INSIG2 | insulin induced gene 2 | 0.915 | 1.726 |
| 8685 | MARCO | macrophage receptor with collagenous structure | -2.747 | 5.095 |
| 130355 | C2orf76 | chromosome 2 open reading frame 76 | 0.731 | 1.773 |
| 5775 | PTPN4 | protein tyrosine phosphatase non-receptor type 4 | -0.893 | 3.211 |
| 79134 | TMEM185B | transmembrane protein 185B | 1.267 | 7.077 |
| 5899 | RALB | RAS like proto-oncogene B | 0.566 | 1.826 |
| 3625 | INHBB | inhibin subunit beta B | 3.311 | 2.67 |
| 23332 | CLASP1 | cytoplasmic linker associated protein 1 | 0.736 | 2.708 |
| 7247 | TSN | translin | 0.832 | 2.426 |
| 2995 | GYPC | glycophorin C (Gerbich blood group) | 1.085 | 3.772 |
| 274 | BIN1 | bridging integrator 1 | -2.211 | 3.596 |
| 107985944 | LOC107985944 | uncharacterized LOC107985944 | 1.098 | 1.336 |
| 9394 | HS6ST1 | heparan sulfate 6-O-sulfotransferase 1 | -2.086 | 10.194 |
| 80097 | MZT2B | mitotic spindle organizing protein 2B | 1.073 | 4.544 |
| 92856 | IMP4 | IMP U3 small nucleolar ribonucleoprotein 4 | -0.437 | 1.456 |
| 50649 | ARHGEF4 | Rho guanine nucleotide exchange factor 4 | 0.373 | 1.303 |
| 55041 | PLEKH2 | pleckstrin homology domain containing B2 | -0.576 | 2.403 |
| 653784 | MZT2A | mitotic spindle organizing protein 2A | 1.768 | 9.126 |
| 113457 | TUBA3D | tubulin alpha 3d | 1.391 | 1.643 |
| 150776 | SMPD4BP | sphingomyelin phosphodiesterase 4B, pseudogene | 1.093 | 2.697 |
| 4249 | MGAT5 | alpha-1,6-mannosylglycoprotein 6-beta-N-acetylglucosaminyltransferase | 1.575 | 6.331 |
| 22930 | RAB3GAP1 | RAB3 GTPase activating protein catalytic subunit 1 | -0.321 | 1.391 |
| 107985946 | LOC107985946 | uncharacterized LOC107985946 | 0.637 | 1.67 |
| 4175 | MCM6 | minichromosome maintenance complex component 6 | 1.833 | 2.084 |
| 101928243 | DARS1-AS1 | DARS1 antisense RNA 1 | 0.774 | 1.846 |
| 112268426 | LOC112268426 | | 0.892 | 2.514 |
| 7852 | CXCR4 | C-X-C motif chemokine receptor 4 | 0.728 | 1.765 |
| 3176 | HNMT | histamine N-methyltransferase | -2.639 | 6.808 |
| 8942 | KYNU | kynureninase | -2.597 | 20.437 |
| 55843 | ARHGAP15 | Rho GTPase activating protein 15 | 1.399 | 14.696 |
| 107985949 | LOC107985949 | uncharacterized LOC107985949 | 2.281 | 3.618 |
| 101928361 | LOC101928361 | uncharacterized LOC101928361 | 2.234 | 7.364 |
| 105373654 | ARHGAP15-AS1 | ARHGAP15 antisense RNA 1 | 1.095 | 2.7 |
| 79712 | GTDC1 | glycosyltransferase like domain containing 1 | 1.292 | 5.202 |
| 9839 | ZEB2 | zinc finger E-box binding homeobox 2 | -1.315 | 6.444 |
| 100303491 | ZEB2-AS1 | ZEB2 antisense RNA 1 | -1.755 | 5.476 |
| 105373656 | LINC02993 | long intergenic non-protein coding RNA 2993 | -1.708 | 2.192 |
| 92 | ACVR2A | activin A receptor type 2A | -3.167 | 11.459 |
| 3800 | KIF5C | kinesin family member 5C | 1.22 | 1.626 |
| 112267889 | KIF5C-AS1 | KIF5C antisense RNA 1 | 1.986 | 1.394 |
| 101928553 | LOC101928553 | uncharacterized LOC101928553 | 2.276 | 5.897 |
| 27249 | MMADHC | metabolism of cobalamin associated D | 1.62 | 6.709 |
| 101929231 | MMADHC-DT | MMADHC divergent transcript | 1.533 | 6.114 |
| 101929319 | LOC101929319 | uncharacterized LOC101929319 | 2.013 | 1.888 |
| 7130 | TNFAIP6 | TNF alpha induced protein 6 | 1.833 | 2.453 |
| 26225 | ARL5A | ADP ribosylation factor like GTPase 5A | -1.116 | 5.653 |
| 114793 | FMNL2 | formin like 2 | -3.119 | 4.615 |
| 151188 | ARL6IP6 | ADP ribosylation factor like GTPase 6 interacting protein 6 | 1.279 | 6.637 |
| 2820 | GPD2 | glycerol-3-phosphate dehydrogenase 2 | 0.775 | 1.406 |
| 57471 | ERMN | ermin | -1.643 | 4.034 |
| 105373711 | LOC105373711 | activin A receptor type 1 | -1.23 | 1.711 |
| 90 | ACVR1 | plakophilin 4 | -2.168 | 7.497 |
| 8502 | PKP4 | PKP4 antisense RNA 1 | 1.76 | 5.059 |
| 107985780 | LOC107985780 | bromodomain adjacent to zinc finger domain 2B | 1.967 | 4.552 |
| 100129029 | PKP4-AS1 | BAZ2B antisense RNA 1 | 2.051 | 3.906 |
| 29994 | BAZ2B | lymphocyte antigen 75 | 0.995 | 6.751 |
| 643072 | BAZ2B-AS1 | dipeptidyl peptidase 4 | 1.637 | 9.252 |
| 4065 | LY75 | interferon induced with helicase C domain 1 | 0.653 | 2.125 |
| 1803 | DPP4 | grancalcin | -2.739 | 1.653 |
| 64135 | IFIH1 | potassium voltage-gated channel subfamily H member 7 | -2.157 | 4.743 |
| 25801 | GCA | fidgetin, microtubule severing factor | 2.565 | 11.472 |
| 90134 | KCNH7 | polypeptide N-acetylgalactosaminyltransferase 3 | 3.853 | 6.79 |
| 55137 | FIGN | tetratricopeptide repeat domain 21B | 5.033 | 2.704 |
| 2591 | GALNT3 | SCN1A and SCN9A antisense RNA 1 | 1.117 | 1.944 |
| 79809 | TTC21B | sodium voltage-gated channel alpha subunit 9 | -0.844 | 2.961 |
| 101929680 | SCN1A-AS1 | nitric oxide synthase trafficking | 2.118 | 1.676 |
| 6335 | SCN9A | SPC25 component of NDC80 kinetochore complex | 2.235 | 2.306 |
| 115677 | NOSTRIN | dehydrogenase/reductase 9 | 2.547 | 1.639 |
| 57405 | SPC25 | FAST kinase domains 1 | 3.747 | 2.909 |
| 10170 | DHRS9 | ubiquitin protein ligase E3 component n-recognin 3 | 2.905 | 6.803 |
| 79675 | FASTKD1 | methyltransferase 8, methylcytidine | -0.823 | 1.574 |
| 130507 | UBR3 | DDB1 and CUL4 associated factor 17 | -0.591 | 4.424 |
| 79828 | METTL8 | integrin subunit alpha 6 | -1.189 | 3.878 |
| 80067 | DCAF17 | pyruvate dehydrogenase kinase 1 | -0.875 | 1.93 |
| 3655 | ITGA6 | mitogen-activated protein kinase kinase kinase 20 | 3.016 | 4.86 |
| 5163 | PDK1 | MAP3K20 antisense RNA 1 | 1.078 | 4.297 |
| 51776 | MAP3K20 | cell division cycle associated 7 | -1.306 | 2.673 |
| 339751 | MAP3K20-AS1 | G protein-coupled receptor 155 | -1.256 | 1.959 |
| 83879 | CDCA7 | H3 histone pseudogene 6 | 2.417 | 2.467 |
| 151556 | GPR155 | lunapark, ER junction formation factor | -2.259 | 4.861 |
| 440926 | H3P6 | Putative uncharacterized protein FLJ44553 | 0.892 | 7.314 |
| 80856 | LNPK | alkylglycerone phosphate synthase | 2.028 | 5.443 |
| 100130691 | LOC100130691 | TTN antisense RNA 1 | 1.079 | 1.94 |
| 8540 | AGPS | titin | 1.517 | 6.8 |
| 100506866 | TTN-AS1 | SEC14 and spectrin domain containing 1 | 1.699 | 2.089 |
| 7273 | TTN | integrin subunit alpha 4 | 1.716 | 2.047 |
| 91404 | SESTD1 | ceramide kinase like | -0.43 | 1.346 |
| 3676 | ITGA4 | | -1.958 | 6.67 |
| 375298 | CERKL | | -1.911 | 5.053 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 54431 | DNAJC10 | DnaJ heat shock protein family (Hsp40) member C10 | -1.061 | 3.316 |
| 91752 | ZNF804A | zinc finger protein 804A | -0.822 | 1.524 |
| 10203 | CALCR | calcitonin receptor like receptor | -1.694 | 1.947 |
| 30061 | SLC40A1 | solute carrier family 40 member 1 | 1.792 | 5.168 |
| 3628 | INPP1 | inositol polyphosphate-1-phosphatase | 1.412 | 7.139 |
| 54842 | MFS6 | major facilitator superfamily domain containing 6 | -1.738 | 6.883 |
| 6772 | STAT1 | signal transducer and activator of transcription 1 | -1.721 | 3.377 |
| 4430 | MYO1B | myosin IB | 5.213 | 9.563 |
| 8436 | CAVIN2 | caveolae associated protein 2 | -1.93 | 2.077 |
| 57181 | SLC39A10 | solute carrier family 39 member 10 | -1.869 | 8.382 |
| 284992 | CCDC150 | coiled-coil domain containing 150 | 3.571 | 6.842 |
| 91526 | ANKRD44 | ankyrin repeat domain 44 | -0.776 | 1.487 |
| 80219 | COQ10B | coenzyme Q10B | 0.703 | 1.354 |
| 25843 | MOB4 | MOB family member 4, phoein | 0.633 | 1.434 |
| 205327 | C2orf69 | chromosome 2 open reading frame 69 | 0.885 | 2.237 |
| 129450 | TYW5 | tRNA- γ W synthesizing protein 5 | 1.207 | 3.421 |
| 26010 | SPATS2L | spermatogenesis associated serine rich 2 like | -2.51 | 2.693 |
| 101927741 | LOC101927741 | uncharacterized LOC101927741 | -2.408 | 2.306 |
| 151246 | SGO2 | shugoshin 2 | 2.24 | 3.782 |
| 1195 | CLK1 | CDC like kinase 1 | 0.84 | 1.698 |
| 4999 | ORC2 | origin recognition complex subunit 2 | 0.959 | 4.659 |
| 285172 | HYCC2 | hyccin PI4KA lipid kinase complex subunit 2 | 0.934 | 2.838 |
| 4709 | NDUFB3 | NADH:ubiquinone oxidoreductase subunit B3 | 0.579 | 2.425 |
| 105373836 | LOC105373836 | uncharacterized LOC105373836 | 2.263 | 3.532 |
| 8837 | CFLAR | CASP8 and FADD like apoptosis regulator | 1.211 | 7.481 |
| 65072 | CFLAR-AS1 | CFLAR antisense RNA 1 | 1.079 | 5.76 |
| 843 | CASP10 | caspase 10 | 0.746 | 3.307 |
| 130540 | FLACC1 | flagellum associated containing coiled-coil domains 1 | -0.89 | 1.792 |
| 66008 | TRAK2 | trafficking kinesin protein 2 | -0.811 | 4.511 |
| 55437 | STRADB | STE20 related adaptor beta | -0.657 | 2.748 |
| 7341 | SUMO1 | small ubiquitin like modifier 1 | 0.489 | 1.589 |
| 659 | BMPR2 | bone morphogenetic protein receptor type 2 | -1.736 | 6.166 |
| 150864 | FAM117B | family with sequence similarity 117 member B | -1.847 | 4.632 |
| 130026 | ICA1L | islet cell autoantigen 1 like | -1.081 | 2.283 |
| 65065 | NBEAL1 | neurobeachin like 1 | -0.753 | 4.681 |
| 10152 | ABI2 | abl interactor 2 | -2.488 | 12.364 |
| 65059 | RAPH1 | Ras association (RalGDS/AF-6) and pleckstrin homology domains 1 | -2.583 | 4.396 |
| 940 | CD28 | CD28 molecule | -4.363 | 3.688 |
| 8828 | NRP2 | neuropilin 2 | -3.878 | 4.952 |
| 54891 | INO80D | INO80 complex subunit D | 0.331 | 1.323 |
| 130749 | CPO | carboxypeptidase O | -1.41 | 1.873 |
| 8609 | KLF7 | KLF transcription factor 7 | 0.977 | 4.71 |
| 105373853 | MYOSLID | myocardin-induced smooth muscle lncRNA, inducer of differentiation | 1.639 | 1.532 |
| 151194 | METTL21A | methyltransferase 21A, HSPA lysine | 0.892 | 3.587 |
| 102724714 | LINC01857 | long intergenic non-protein coding RNA 1857 | -5.548 | 4.03 |
| 7855 | FZD5 | frizzled class receptor 5 | 0.604 | 1.536 |
| 200576 | PIKFYVE | phosphoinositide kinase, FYVE-type zinc finger containing | 0.357 | 1.589 |
| 5746 | PTH2R | parathyroid hormone 2 receptor | 3.421 | 4.332 |
| 151050 | KANSL1L | KAT8 regulatory NSL complex subunit 1 like | 0.566 | 1.573 |
| 101928020 | KANSL1L-AS1 | KANSL1L antisense RNA 1 | 1.142 | 1.408 |
| 580 | BARD1 | BRCA1 associated RING domain 1 | 1.864 | 4.493 |
| 471 | ATIC | 5-aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase | -1.09 | 5.298 |
| 55686 | MREG | melanoregulin | 2.325 | 7.015 |
| 55825 | PECR | peroxisomal trans-2-enoyl-CoA reductase | 2.88 | 14.051 |
| 7520 | XRCC5 | X-ray repair cross complementing 5 | 0.932 | 4.995 |
| 50485 | SMARCAL1 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a like 1 | -0.56 | 1.348 |
| 6168 | RPL37A | ribosomal protein L37a | -0.596 | 2.029 |
| 3485 | IGFBP2 | insulin like growth factor binding protein 2 | 3.208 | 14.245 |
| 7145 | TNS1 | tensin 1 | -3.359 | 6.35 |
| 285180 | RUFY4 | RUN and FYVE domain containing 4 | -4.393 | 12.136 |
| 3580 | CXCR2P1 | C-X-C motif chemokine receptor 2 pseudogene 1 | -5.894 | 14.752 |
| 3577 | CXCR1 | C-X-C motif chemokine receptor 1 | 1.969 | 1.884 |
| 10109 | ARPC2 | actin related protein 2/3 complex subunit 2 | 0.67 | 6.501 |
| 151306 | GPBAR1 | G protein-coupled bile acid receptor 1 | -3.322 | 19.262 |
| 14 | AAMP | angio associated migratory cell protein | -1.301 | 8.515 |
| 25953 | PNKD | PNKD metallo-beta-lactamase domain containing | -1.693 | 7.35 |
| 103689911 | CATIP-AS2 | CATIP antisense RNA 2 | -1.784 | 2.076 |
| 375307 | CATIP | ciliogenesis associated TTC17 interacting protein | -1.84 | 2.39 |
| 101928513 | CATIP-AS1 | CATIP antisense RNA 1 | -1.511 | 1.478 |
| 58190 | CTDSP1 | CTD small phosphatase 1 | 0.377 | 1.551 |
| 7701 | ZNF142 | zinc finger protein 142 | 0.459 | 1.598 |
| 27148 | STK36 | serine/threonine kinase 36 | -1.198 | 3.034 |
| 9654 | TTLL4 | tubulin tyrosine ligase like 4 | -1.339 | 4.505 |
| 1593 | CYP27A1 | cytochrome P450 family 27 subfamily A member 1 | -2.218 | 3.115 |
| 53632 | PRKAG3 | protein kinase AMP-activated non-catalytic subunit gamma 3 | -1.712 | 1.339 |
| 79840 | NHEJ1 | non-homologous end joining factor 1 | -1.256 | 4.712 |
| 130617 | ZFAND2B | zinc finger AN1-type containing 2B | 0.43 | 1.675 |
| 79065 | ATG9A | autophagy related 9A | 0.64 | 1.459 |
| 8576 | STK16 | serine/threonine kinase 16 | 0.839 | 4.147 |
| 7277 | TUBA4A | tubulin alpha 4a | 2.042 | 19.525 |
| 80086 | TUBA4B | tubulin alpha 4b | 1.333 | 2.437 |
| 23549 | DNPEP | aspartyl aminopeptidase | -2.047 | 11.423 |
| 1674 | DES | desmin | -3.395 | 3.77 |
| 440934 | CT75 | cancer/testis associated transcript 75 | 1.547 | 1.615 |
| 8452 | CUL3 | cullin 3 | 0.565 | 3.899 |
| 55619 | DOCK10 | dedicator of cytokinesis 10 | -1.558 | 5.581 |
| 3667 | IRS1 | insulin receptor substrate 1 | -2.823 | 3.192 |
| 84236 | RHBDD1 | rhomboid domain containing 1 | -1.101 | 7.067 |
| 1286 | COL4A4 | collagen type IV alpha 4 chain | -1.976 | 2.527 |
| 1285 | COL4A3 | collagen type IV alpha 3 chain | -3.299 | 2.879 |
| 56947 | MFF | mitochondrial fission factor | 0.703 | 2.543 |
| 3267 | AGFG1 | ArfGAP with FG repeats 1 | 1.132 | 3.447 |
| 6364 | CCL20 | C-C motif chemokine ligand 20 | 4.631 | 2.781 |
| 164781 | DAW1 | dynein assembly factor with WD repeats 1 | 2.845 | 1.553 |
| 55022 | PID1 | phosphotyrosine interaction domain containing 1 | -3.918 | 4.575 |
| 151473 | SLC16A14 | solute carrier family 16 member 14 | 4.557 | 11.887 |
| 3431 | SP110 | SP110 nuclear body protein | -1.523 | 2.869 |
| 11262 | SP140 | SP140 nuclear body protein | -1.025 | 1.632 |
| 93349 | SP140L | SP140 nuclear body protein like | -1.242 | 6.063 |
| 105373925 | LOC105373925 | uncharacterized LOC105373925 | -1.167 | 2.629 |
| 151475 | LINC01907 | long intergenic non-protein coding RNA 1907 | 2.283 | 5.363 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 51719 | CAB39 | calcium binding protein 39 | 0.493 | 1.411 |
| 81618 | ITM2C | integral membrane protein 2C | 2.815 | 3.75 |
| 9290 | GPR55 | G protein-coupled receptor 55 | -2.495 | 1.894 |
| 93010 | B3GNT7 | UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 7 | 1.877 | 1.32 |
| 10316 | NMUR1 | neuromedin U receptor 1 | 2.247 | 1.897 |
| 5757 | PTMA | prothymosin alpha | -0.406 | 1.497 |
| 129563 | DIS3L2 | DIS3 like 3'-5' exoribonuclease 2 | -0.76 | 3.378 |
| 9470 | EIF4E2 | eukaryotic translation initiation factor 4E family member 2 | -0.785 | 4.09 |
| 55054 | ATG16L1 | autophagy related 16 like 1 | 0.808 | 1.648 |
| 8527 | DGKD | diacylglycerol kinase delta | 1.027 | 7.384 |
| 55230 | USP40 | ubiquitin specific peptidase 40 | -1.623 | 13.812 |
| 55355 | HJURP | Holliday junction recognition protein | 3.548 | 2.092 |
| 10123 | ARL4C | ADP ribosylation factor like GTPase 4C | -4.535 | 16.449 |
| 23677 | SH3BP4 | SH3 domain binding protein 4 | -3.722 | 4.393 |
| 80895 | ILKAP | ILK associated serine/threonine phosphatase | 0.576 | 1.606 |
| 151174 | LINC02610 | long intergenic non-protein coding RNA 2610 | 2.055 | 1.5 |
| 26146 | TRAF3IP1 | TRAF3 interacting protein 1 | -1.578 | 6.508 |
| 117581 | TWIST2 | twist family bHLH transcription factor 2 | 2.635 | 1.855 |
| 9759 | HDAC4 | histone deacetylase 4 | 1.146 | 2.497 |
| 85009 | MGC16025 | uncharacterized LOC85009 | 2.136 | 3.013 |
| 4705 | NDUFA10 | NADH:ubiquinone oxidoreductase subunit A10 | -0.39 | 1.635 |
| 2859 | GPR35 | G protein-coupled receptor 35 | -1.415 | 1.797 |
| 728763 | CROCC2 | ciliary rootlet coiled-coil, rootletin family member 2 | -7.936 | 16.488 |
| 200772 | UICLM | up-regulated in colorectal cancer liver metastasis | -7.062 | 20.203 |
| 25992 | SNED1 | sushi, nidogen and EGF like domains 1 | -2.244 | 6.46 |
| 50636 | ANO7 | anoctamin 7 | 0.977 | 1.726 |
| 4735 | SEPTIN2 | septin 2 | -0.558 | 2.855 |
| 9855 | FARP2 | FERM, ARH/RhoGEF and pleckstrin domain protein 2 | -1.15 | 2.941 |
| 105373973 | LOC105373973 | uncharacterized LOC105373973 | -2.482 | 2.316 |
| 10494 | STK25 | serine/threonine kinase 25 | -0.411 | 1.538 |
| 1841 | DTYMK | deoxythymidylate kinase | 0.958 | 1.497 |
| 84289 | ING5 | inhibitor of growth family member 5 | 1.137 | 13.959 |
| 728294 | D2HGDH | D-2-hydroxyglutarate dehydrogenase | 1.082 | 2.699 |
| 5133 | PCD1 | programmed cell death 1 | -2.455 | 1.967 |
| 102723927 | LINC01238 | long intergenic non-protein coding RNA 1238 | -3.234 | 5.632 |
| 57633 | LRRN1 | leucine rich repeat neuronal 1 | 2.679 | 2.34 |
| 3708 | ITPR1 | inositol 1,4,5-trisphosphate receptor type 1 | -2.339 | 9.287 |
| 100507582 | BHLHE40-AS1 | BHLHE40 antisense RNA 1 | -1.357 | 2.334 |
| 8553 | BHLHE40 | basic helix-loop-helix family member e40 | -1.434 | 3.011 |
| 9695 | EDEM1 | ER degradation enhancing alpha-mannosidase like protein 1 | 0.68 | 2.772 |
| 56852 | RAD18 | RAD18 E3 ubiquitin protein ligase | 0.847 | 1.598 |
| 9901 | SRGAP3 | SLIT-ROBO Rho GTPase activating protein 3 | -1.122 | 1.931 |
| 440944 | THUMPD3-AS1 | THUMPD3 antisense RNA 1 | 0.989 | 5.361 |
| 8536 | CAMK1 | calcium/calmodulin dependent protein kinase I | -2.199 | 19.787 |
| 10093 | ARPC4 | actin related protein 2/3 complex subunit 4 | 0.702 | 7.704 |
| 100526693 | ARPC4-TLLL3 | ARPC4-TLLL3 readthrough | 0.838 | 5.028 |
| 26140 | TTLL3 | tubulin tyrosine ligase like 3 | 1.107 | 3.26 |
| 84522 | JAGN1 | jagunal homolog 1 | -0.631 | 1.865 |
| 84818 | IL17RC | interleukin 17 receptor C | -0.633 | 1.303 |
| 78987 | CRELD1 | cysteine rich with EGF like domains 1 | -1.039 | 3.361 |
| 442075 | EMC3-AS1 | EMC3 antisense RNA 1 | 1.623 | 2.944 |
| 152302 | CIDECP1 | CIDEC pseudogene 1 | 1.102 | 3.517 |
| 2177 | FANCD2 | FA complementation group D2 | 1.926 | 3.148 |
| 3656 | IRAK2 | interleukin 1 receptor associated kinase 2 | 1.842 | 6.795 |
| 9797 | TATDN2 | TatD DNase domain containing 2 | 0.753 | 3.806 |
| 113219470 | MIR12127 | microRNA 12127 | 1.088 | 3.44 |
| 100126793 | GHRLOS | ghrelin opposite strand/antisense RNA | 1.124 | 3.667 |
| 84657 | LINC00852 | long intergenic non-protein coding RNA 852 | 1.003 | 2.417 |
| 51738 | GHRL | ghrelin and obestatin prepropeptide | 1.489 | 4.209 |
| 102723663 | LOC102723663 | uncharacterized LOC102723663 | 1.666 | 4.636 |
| 10533 | ATG7 | autophagy related 7 | 0.401 | 1.599 |
| 9686 | VGLL4 | vestigial like family member 4 | 0.449 | 1.467 |
| 6854 | SYN2 | synapsin II | 2.554 | 2.542 |
| 5468 | PPARG | peroxisome proliferator activated receptor gamma | 3.019 | 8.087 |
| 80746 | TSEN2 | tRNA splicing endonuclease subunit 2 | -0.993 | 1.671 |
| 5894 | RAF1 | Raf-1 proto-oncogene, serine/threonine kinase | 0.614 | 1.846 |
| 6161 | RPL32 | ribosomal protein L32 | -0.693 | 2.657 |
| 131474 | CHCHD4 | coiled-coil-helix-coiled-coil-helix domain containing 4 | -1.298 | 2.048 |
| 7508 | XPC | XPC complex subunit, DNA damage recognition and repair factor | -0.801 | 1.86 |
| 105376959 | LOC105376959 | uncharacterized LOC105376959 | 3.073 | 3.692 |
| 84077 | C3orf20 | chromosome 3 open reading frame 20 | 0.74 | 1.508 |
| 64432 | MRPS25 | mitochondrial ribosomal protein S25 | -0.5 | 2.666 |
| 64145 | RBSN | rabenosyn, RAB effector | 0.601 | 1.754 |
| 23243 | ANKRD28 | ankyrin repeat domain 28 | 1.963 | 4.33 |
| 101927647 | LOC101927647 | uncharacterized LOC101927647 | 1.76 | 1.519 |
| 92106 | OXNAD1 | oxidoreductase NAD binding domain containing 1 | -2 | 8.626 |
| 23180 | RFTN1 | raftlin, lipid raft linker 1 | -2.617 | 28.987 |
| 23228 | PLCL2 | phospholipase C like 2 | 0.419 | 1.4 |
| 105376972 | LOC105376972 | uncharacterized LOC105376972 | 1.74 | 1.922 |
| 5868 | RAB5A | RAB5A, member RAS oncogene family | 0.434 | 1.61 |
| 151648 | SGO1 | shugoshin 1 | 2.405 | 4.021 |
| 100874028 | SGO1-AS1 | SGO1 antisense RNA 1 | 2.77 | 2.575 |
| 7325 | UBE2E2 | ubiquitin conjugating enzyme E2 E2 | -1.88 | 3.887 |
| 107986069 | LOC107986069 | nuclear receptor subfamily 1 group D member 2 | -1.986 | 2.696 |
| 9975 | NR1D2 | THRB antisense RNA 2 | -1.556 | 2.288 |
| 101927854 | THR-B-AS2 | solute carrier family 4 member 7 | -2.924 | 1.66 |
| 9497 | SLC4A7 | uncharacterized LOC105377016 | -1.927 | 4.942 |
| 105377016 | LOC105377016 | oxysterol binding protein like 10 | 1.231 | 3.811 |
| 114884 | OSBPL10 | CKLF like MARVEL transmembrane domain containing 6 | -4.421 | 4.051 |
| 54918 | CMTM6 | galactosidase beta 1 | 0.517 | 2.36 |
| 2720 | GLB1 | cartilage associated protein | -0.934 | 4.902 |
| 10491 | CRTAP | upstream binding protein 1 | -1.217 | 3.555 |
| 7342 | UBP1 | cytoplasmic linker associated protein 2 | -0.643 | 3.35 |
| 23122 | CLASP2 | EPM2A interacting protein 1 | -0.504 | 2.674 |
| 9852 | EPM2AIP1 | LRR binding FLII interacting protein 2 | 0.857 | 3.149 |
| 9209 | LRRFIP2 | integriin subunit alpha 9 | 0.849 | 4.024 |
| 112268444 | LOC112268444 | ITGA9 | 1.142 | 2.72 |
| 3680 | ITGA9 | ITGA9 antisense RNA 1 | 2.368 | 2.454 |
| 101928153 | ITGA9-AS1 | CTD small phosphatase like | 2.346 | 3.469 |
| 10217 | CTDSPL | villin like | 1.963 | 3.275 |
| 50853 | VILL | | 0.627 | 2.208 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 5333 | PLCD1 | phospholipase C delta 1 | 1.739 | 8.358 |
| 9389 | SLC22A14 | solute carrier family 22 member 14 | 2.88 | 3.606 |
| 93 | ACVR2B | activin A receptor type 2B | -1.006 | 1.791 |
| 6331 | SCN5A | sodium voltage-gated channel alpha subunit 5 | 5.423 | 4.561 |
| 64689 | GORASP1 | golgi reassembly stacking protein 1 | -0.659 | 3.467 |
| 199223 | TTC21A | tetratricopeptide repeat domain 21A | -2.115 | 3.532 |
| 1524 | CX3CR1 | C-X3-C motif chemokine receptor 1 | -3.634 | 5.162 |
| 54977 | SLC25A38 | solute carrier family 25 member 38 | 0.821 | 1.826 |
| 440952 | EIF1B-AS1 | EIF1B antisense RNA 1 | 1.551 | 2.721 |
| 10289 | EIF1B | eukaryotic translation initiation factor 1B | 1.475 | 3.321 |
| 9045 | RPL14 | ribosomal protein L14 | -0.533 | 1.915 |
| 22906 | TRAK1 | trafficking kinesin protein 1 | -1.507 | 18.583 |
| 7433 | VIPR1 | vasoactive intestinal peptide receptor 1 | -1.833 | 4.526 |
| 100874007 | VIPR1-AS1 | VIPR1 antisense RNA 1 | -1.595 | 1.79 |
| 9117 | SEC22C | SEC22 homolog C, vesicle trafficking protein | 0.72 | 4.55 |
| 92999 | ZBTB47 | zinc finger and BTB domain containing 47 | -0.444 | 1.369 |
| 54861 | SNRK | SNF related kinase | 0.924 | 3.66 |
| 100873954 | SNRK-AS1 | SNRK antisense RNA 1 | 0.973 | 3.978 |
| 55129 | ANO10 | anoctamin 10 | 2.109 | 8.647 |
| 51099 | ABHD5 | abhydrolase domain containing 5, lysophosphatidic acid acyltransferase | 2.431 | 9.577 |
| 102724231 | C3orf86P | long intergenic non-protein coding RNA 694 | 2.214 | 8.66 |
| 100506319 | LINC01988 | long intergenic non-protein coding RNA 1988 | 2.447 | 2.685 |
| 353274 | ZNF445 | zinc finger protein 445 | 0.55 | 2.403 |
| 285346 | ZNF852 | zinc finger protein 852 | 0.654 | 2.216 |
| 285349 | ZNF660 | zinc finger protein 660 | 1.374 | 1.393 |
| 56992 | KIF15 | kinesin family member 15 | 2.993 | 2.608 |
| 51304 | ZDHHC3 | zinc finger DHHC-type palmitoyltransferase 3 | 1.136 | 11.177 |
| 8994 | LIMD1 | LIM domain containing 1 | -1.66 | 13.442 |
| 644714 | LIMD1-AS1 | LIMD1 antisense RNA 1 | -1.744 | 7.872 |
| 54585 | LZTFL1 | leucine zipper transcription factor like 1 | -0.982 | 2.144 |
| 10803 | CCR9 | C-C motif chemokine receptor 9 | -2.216 | 2.343 |
| 79443 | FYCO1 | FYVE and coiled-coil domain autophagy adaptor 1 | -0.907 | 4.91 |
| 2829 | XCR1 | X-C motif chemokine receptor 1 | 2.677 | 1.372 |
| 105377067 | LOC105377067 | uncharacterized LOC105377067 | 2.859 | 1.354 |
| 1230 | CCR1 | C-C motif chemokine receptor 1 | -2.191 | 2.892 |
| 729230 | CCR2 | C-C motif chemokine receptor 2 | -2.28 | 5.873 |
| 102724297 | CCR5AS | CCR5 antisense RNA | -2.826 | 4.811 |
| 1234 | CCR5 | C-C motif chemokine receptor 5 | -4.779 | 11.885 |
| 9034 | CCR2L | C-C motif chemokine receptor like 2 | -1.177 | 1.55 |
| 105377068 | LINC02009 | long intergenic non-protein coding RNA 2009 | 3.515 | 2.07 |
| 4057 | LTF | lactotransferrin | 3.118 | 2.324 |
| 259173 | ALS2CL | ALS2 C-terminal like | -4.708 | 20.551 |
| 151903 | CCDC12 | coiled-coil domain containing 12 | -0.574 | 1.782 |
| 23218 | NBEAL2 | neurobeachin like 2 | 1.111 | 7.179 |
| 100129354 | NRADDP | neurotrophin receptor associated death domain, pseudogene | 1.094 | 1.597 |
| 285352 | KIF9-AS1 | KIF9 antisense RNA 1 | 0.777 | 1.354 |
| 64147 | KIF9 | kinesin family member 9 | 0.86 | 2.098 |
| 6599 | SMARCC1 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin subfamily c member 1 | -0.67 | 3.259 |
| 993 | CDC25A | cell division cycle 25A | 3.918 | 4.598 |
| 820 | CAMP | cathelicidin antimicrobial peptide | 2.76 | 1.308 |
| 646424 | SPINK8 | serine peptidase inhibitor Kazal type 8 (putative) | 3.284 | 3.068 |
| 51372 | TMA7 | translation machinery associated 7 homolog | 0.83 | 4.008 |
| 84126 | ATRIP | ATR interacting protein | -1.275 | 7.743 |
| 111822955 | ATRIP-TREX1 | ATRIP-TREX1 readthrough | -1.311 | 8.363 |
| 11277 | TREX1 | three prime repair exonuclease 1 | -1.895 | 13.733 |
| 51246 | SHISA5 | shisa family member 5 | -1.037 | 1.774 |
| 65010 | SLC26A6 | solute carrier family 26 member 6 | 1.886 | 11.315 |
| 102465495 | MIR6824 | microRNA 6824 | 1.976 | 1.968 |
| 1951 | CELSR3 | cadherin EGF LAG seven-pass G-type receptor 3 | -0.985 | 2.291 |
| 51447 | IP6K2 | inositol hexakisphosphate kinase 2 | 0.656 | 1.454 |
| 10425 | ARIH2 | ariadne RBR E3 ubiquitin protein ligase 2 | -0.466 | 2.566 |
| 55152 | DALRD3 | DALR anticodon binding domain containing 3 | 0.517 | 2.018 |
| 3913 | LAMB2 | laminin subunit beta 2 | -3.036 | 8.09 |
| 64925 | CCDC71 | coiled-coil domain containing 71 | -0.647 | 1.763 |
| 200942 | KLHDC8B | kelch domain containing 8B | -1.693 | 4.001 |
| 375341 | C3orf62 | chromosome 3 open reading frame 62 | 0.663 | 1.85 |
| 2876 | GPX1 | glutathione peroxidase 1 | -1.399 | 3.007 |
| 275 | AMT | aminomethyltransferase | 0.573 | 1.471 |
| 84276 | NICN1 | nicolin 1, tubulin polyglutamylase complex subunit | 0.524 | 1.72 |
| 1605 | DAG1 | dystroglycan 1 | -1.631 | 14.61 |
| 4485 | MST1 | macrophage stimulating 1 | 0.783 | 1.897 |
| 386724 | AMIGO3 | adhesion molecule with Ig like domain 3 | 0.674 | 1.96 |
| 7318 | UBA7 | ubiquitin like modifier activating enzyme 7 | -0.877 | 3.222 |
| 100847079 | MIR5193 | microRNA 5193 | -0.691 | 1.53 |
| 10293 | TRAIP | TRAF interacting protein | 2.001 | 2.717 |
| 84315 | MON1A | MON1 homolog A, secretory trafficking associated | -0.837 | 1.815 |
| 10180 | RBM6 | RNA binding motif protein 6 | -0.564 | 2.494 |
| 10181 | RBM5 | RNA binding motif protein 5 | 0.569 | 2.554 |
| 100775107 | RBM5-AS1 | RBM5 antisense RNA 1 | 0.566 | 1.832 |
| 100129060 | SEMA3F-AS1 | SEMA3F antisense RNA 1 | 0.629 | 1.78 |
| 7866 | IFRD2 | interferon related developmental regulator 2 | -1.153 | 4.337 |
| 8372 | HYAL3 | hyaluronidase 3 | 2.104 | 3.072 |
| 24142 | NAA80 | N-alpha-acetyltransferase 80, Nath catalytic subunit | 1.667 | 3.972 |
| 8692 | HYAL2 | hyaluronidase 2 | -1.135 | 3.017 |
| 11186 | RASSF1 | Ras association domain family member 1 | 0.588 | 2.566 |
| 51364 | ZMYND10 | zinc finger MYND-type containing 10 | 1.027 | 2.392 |
| 10641 | NPRL2 | NPRL2 like, GATOR1 complex subunit | 0.595 | 2.25 |
| 51409 | HEMK1 | HemK methyltransferase family member 1 | -0.773 | 2.045 |
| 1154 | CISH | cytokine inducible SH2 containing protein | -1.634 | 6.507 |
| 29890 | RBM15B | RNA binding motif protein 15B | -0.839 | 4.679 |
| 51368 | TEX264 | testis expressed 264, ER-phagy receptor | -0.627 | 2.327 |
| 9136 | RRP9 | ribosomal RNA processing 9, U3 small nucleolar RNA binding protein | -1.173 | 3.878 |
| 10039 | PARP3 | poly(ADP-ribose) polymerase family member 3 | -1.964 | 8.142 |
| 84836 | ABHD14B | abhydrolase domain containing 14B | -1.092 | 6.2 |
| 100526760 | ABHD14A-ACY1 | ABHD14A-ACY1 readthrough | -1.814 | 6.13 |
| 95 | ACY1 | aminoacylase 1 | -2.201 | 5.211 |
| 6159 | RPL29 | ribosomal protein L29 | -0.674 | 2.226 |
| 1849 | DUSP7 | dual specificity phosphatase 7 | -2.183 | 14.206 |
| 25886 | POC1A | POC1 centriolar protein A | 1.945 | 3.469 |
| 211 | ALAS1 | 5'-aminolevulinate synthase 1 | 1.079 | 1.486 |
| 54106 | TLR9 | toll like receptor 9 | 1.228 | 1.969 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 132160 | PPM1M | protein phosphatase, Mg2+/Mn2+ dependent 1M | 0.615 | 3.159 |
| 132158 | GLYCTK | glycerate kinase | 1.012 | 6.935 |
| 51533 | PHF7 | PHD finger protein 7 | 0.607 | 1.588 |
| 23166 | STAB1 | stabin 1 | -2.048 | 4.896 |
| 26354 | GNL3 | G protein nucleolar 3 | -0.883 | 6.962 |
| 6787 | NEK4 | NIMA related kinase 4 | -0.705 | 2.085 |
| 3697 | ITIH1 | inter-alpha-trypsin inhibitor heavy chain 1 | -3.216 | 2.98 |
| 7086 | TKT | transketolase | 1.097 | 5.831 |
| 776 | CACNA1D | calcium voltage-gated channel subunit alpha1 D | 2.313 | 3.394 |
| 55349 | CHDH | choline dehydrogenase | 3.112 | 3.241 |
| 55799 | CACNA2D3 | calcium voltage-gated channel auxiliary subunit alpha2delta 3 | -2.2 | 1.789 |
| 285331 | CCDC66 | coiled-coil domain containing 66 | 0.674 | 1.404 |
| 50650 | ARHGEF3 | Rho guanine nucleotide exchange factor 3 | -1.834 | 7.67 |
| 8820 | HESX1 | HESX homeobox 1 | -2.58 | 2.518 |
| 201627 | DENND6A | DENN domain containing 6A | -0.406 | 2.226 |
| 7871 | SLMAP | sarcolemma associated protein | 0.411 | 1.46 |
| 2317 | FLNB | filamin B | -1.495 | 3.027 |
| 105377105 | FLNB-AS1 | FLNB antisense RNA 1 | -1.438 | 2.931 |
| 57406 | ABHD6 | abhydrolase domain containing 6, acylglycerol lipase | -2.892 | 15.258 |
| 54899 | PXK | PX domain containing serine/threonine kinase like | 0.936 | 6.116 |
| 107986092 | LOC107986092 | uncharacterized LOC107986092 | -3.704 | 4.986 |
| 200845 | KCTD6 | potassium channel tetramerization domain containing 6 | -1.403 | 3.39 |
| 2272 | FHIT | fragile histidine triad diadenosine triphosphatase | -1.014 | 1.875 |
| 57415 | C3orf14 | chromosome 3 open reading frame 14 | -2.565 | 2.965 |
| 9861 | PSMD6 | proteasome 26S subunit, non-ATPase 6 | 0.539 | 1.865 |
| 26018 | LRIG1 | leucine rich repeats and immunoglobulin like domains 1 | 1.647 | 4.271 |
| 8801 | SUCLG2 | succinate-CoA ligase GDP-forming subunit beta | -0.823 | 2.345 |
| 9039 | UBA3 | ubiquitin like modifier activating enzyme 3 | -0.446 | 1.796 |
| 10550 | ARL6IP5 | ADP ribosylation factor like GTPase 6 interacting protein 5 | -0.599 | 2.552 |
| 4286 | MITF | melanocyte inducing transcription factor | -2.036 | 3.665 |
| 317649 | EIF4E3 | eukaryotic translation initiation factor 4E family member 3 | 0.579 | 1.572 |
| 2850 | GPR27 | G protein-coupled receptor 27 | 2.49 | 14.689 |
| 60675 | PROK2 | prokineticin 2 | 3.223 | 17.869 |
| 285286 | LINC00877 | long intergenic non-protein coding RNA 877 | -2.116 | 4.47 |
| 727936 | GXVLT2 | glucoside xylosyltransferase 2 | 3.403 | 2.679 |
| 151987 | PPP4R2 | protein phosphatase 4 regulatory subunit 2 | 1.282 | 5.406 |
| 55096 | EBLN2 | endogenous Bornavirus like nucleoprotein 2 | 1.229 | 2.652 |
| 692099 | FAM86DP | family with sequence similarity 86 member D, pseudogene | -1.137 | 1.719 |
| 2632 | GBE1 | 1,4-alpha-glucan branching enzyme 1 | 2.088 | 8.328 |
| 8545 | CGGBP1 | CGG triplet repeat binding protein 1 | 0.354 | 1.355 |
| 200894 | ARL13B | ADP ribosylation factor like GTPase 13B | -0.942 | 1.947 |
| 131544 | CRYBG3 | crystallin beta-gamma domain containing 3 | -2.923 | 33.505 |
| 84864 | RIOX2 | ribosomal oxygenase 2 | -2.858 | 18.602 |
| 1371 | CPOX | coproporphyrinogen oxidase | -1.189 | 3.245 |
| 56954 | NIT2 | nitrilase family member 2 | 1.184 | 4.177 |
| 9868 | TOMM70 | translocase of outer mitochondrial membrane 70 | -0.559 | 1.408 |
| 54931 | TRMT10C | tRNA methyltransferase 10C, mitochondrial RNase P subunit | -1.293 | 2.8 |
| 79598 | CEP97 | centrosomal protein 97 | 1.852 | 8.09 |
| 91775 | NXPE3 | neurexophilin and PC-esterase domain family member 3 | 0.672 | 3.665 |
| 152225 | RDUR | RIG-I dependent antiviral response regulator RNA | -3.027 | 3.25 |
| 214 | ALCAM | activated leukocyte cell adhesion molecule | 1.114 | 7.627 |
| 56987 | BBX | BBX high mobility group box domain containing | -0.682 | 2.776 |
| 961 | CD47 | CD47 molecule | 0.743 | 2.496 |
| 55081 | IFT57 | intraflagellar transport 57 | 0.684 | 1.867 |
| 57650 | CIP2A | cellular inhibitor of PP2A | 1.74 | 2.223 |
| 50852 | TRAT1 | T cell receptor associated transmembrane adaptor 1 | -3.424 | 2.541 |
| 55211 | DPPA4 | developmental pluripotency associated 4 | 3.175 | 6.272 |
| 257144 | GCSAM | germinal center associated signaling and motility | 1.396 | 1.305 |
| 151888 | BTLA | B and T lymphocyte associated | -3.07 | 2.104 |
| 131450 | CD200R1 | CD200 receptor 1 | 1.358 | 1.343 |
| 107986114 | NEPRO-AS1 | NEPRO antisense RNA 1 | -1.033 | 1.318 |
| 107986113 | LOC107986113 | cilia and flagella associated protein 44 | -2.13 | 2.317 |
| 55779 | CFAP44 | spindle and centriole associated protein 1 | -0.768 | 1.555 |
| 152185 | SPICE1 | SID1 transmembrane family member 1 | -0.656 | 1.462 |
| 54847 | SIDT1 | ATPase H+ transporting V1 subunit A | -2.938 | 3.157 |
| 523 | ATP6V1A | queuine tRNA-ribosyltransferase accessory subunit 2 | -0.729 | 1.357 |
| 79691 | QTRT2 | beta-1,4-galactosyltransferase 4 | -0.823 | 3.463 |
| 8702 | B4GALT4 | B4GALT4 antisense RNA 1 | 1.534 | 3.468 |
| 100874201 | B4GALT4-AS1 | Rho GTPase activating protein 31 | 1.462 | 2.064 |
| 57514 | ARHGAP31 | ARHGAP31 antisense RNA 1 | -2.354 | 17.907 |
| 100874246 | ARHGAP31-AS1 | transmembrane protein 39A | -1.889 | 2.731 |
| 55254 | TMEM39A | protein O-glucosyltransferase 1 | 0.58 | 1.7 |
| 56983 | POGLUT1 | CD80 molecule | -1.064 | 8.127 |
| 941 | CD80 | ADP-ribosylarginine hydrolase | -3.175 | 3.81 |
| 141 | ADPRH | phospholipase A1 member A | -2.448 | 10.869 |
| 51365 | PLA1A | cytochrome c oxidase copper chaperone COX17 | -4.846 | 3.215 |
| 10063 | COX17 | GSK3B divergent transcript | 0.685 | 3.404 |
| 107986119 | GSK3B-DT | DNA polymerase theta | 1.904 | 3.426 |
| 10721 | POLQ | F-box protein 40 | 2.827 | 2.723 |
| 51725 | FBXO40 | ELL associated factor 2 | 1.31 | 3.937 |
| 55840 | EAF2 | solute carrier family 15 member 2 | 0.958 | 1.649 |
| 6565 | SLC15A2 | CD86 molecule | 0.594 | 1.383 |
| 942 | CD86 | cystatin A | -3.334 | 17.955 |
| 1475 | CSTA | uncharacterized LOC105374071 | 0.743 | 10.276 |
| 83666 | PARP9 | poly(ADP-ribose) polymerase family member 9 | -1.297 | 1.647 |
| 151636 | DTX3L | deltex E3 ubiquitin ligase 3L | -1.525 | 1.874 |
| 165631 | PARP15 | poly(ADP-ribose) polymerase family member 15 | -1.096 | 1.81 |
| 54625 | PARP14 | poly(ADP-ribose) polymerase family member 14 | -2.827 | 7.336 |
| 10954 | PDIA5 | protein disulfide isomerase family A member 5 | -2.548 | 5.247 |
| 201562 | HACD2 | 3-hydroxyacyl-CoA dehydratase 2 | -0.61 | 1.504 |
| 64770 | CCDC14 | coiled-coil domain containing 14 | -0.821 | 2.007 |
| 3693 | ITGB5 | integrin subunit beta 5 | 1.109 | 3.606 |
| 57493 | HEG1 | heart development protein with EGF like domains 1 | -1.164 | 1.856 |
| 114885 | OSBPL11 | oxysterol binding protein like 11 | -4.435 | 14.532 |
| 54946 | SLC41A3 | solute carrier family 41 member 3 | -0.946 | 2.202 |
| 79364 | ZXDC | ZXD family zinc finger C | -0.907 | 1.758 |
| 166012 | CHST13 | carbohydrate sulfotransferase 13 | 0.677 | 3.494 |
| 152065 | C3orf22 | chromosome 3 open reading frame 22 | -2.136 | 2.25 |
| 84303 | CHCHD6 | coiled-coil-helix-coiled-coil-helix domain containing 6 | -2.083 | 1.399 |
| 5361 | PLXNA1 | plexin A1 | -1.793 | 2.694 |
| | | | -2.898 | 6.59 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 4171 | MCM2 | minichromosome maintenance complex component 2 | 2.348 | 2.392 |
| 107986126 | LOC107986126 | uncharacterized LOC107986126 | 2.41 | 2.753 |
| 80325 | ABTB1 | ankyrin repeat and BTB domain containing 1 | 1.398 | 3.565 |
| 60678 | EEFSEC | eukaryotic elongation factor, selenocysteine-tRNA specific | -1.225 | 8.284 |
| 6184 | RPN1 | ribophorin I | -0.29 | 1.359 |
| 100534599 | ISY1-RAB43 | ISY1-RAB43 readthrough | 0.597 | 1.564 |
| 339122 | RAB43 | RAB43, member RAS oncogene family | 0.837 | 2.554 |
| 57461 | ISY1 | ISY1 splicing factor homolog | 0.41 | 1.318 |
| 7555 | CNBP | CCHC-type zinc finger nucleic acid binding protein | -0.754 | 4.762 |
| 90288 | EFCAB12 | EF-hand calcium binding domain 12 | 2.117 | 4.718 |
| 8930 | MBD4 | methyl-CpG binding domain 4, DNA glycosylase | 1.044 | 5.291 |
| 55764 | IFT122 | intraflagellar transport 122 | 0.962 | 3.655 |
| 132243 | H1-8 | H1.8 linker histone | -2.811 | 2.082 |
| 23129 | PLXND1 | plexin D1 | -2.591 | 5.491 |
| 30849 | PIK3R4 | phosphoinositide-3-kinase regulatory subunit 4 | -0.666 | 2.344 |
| 28990 | ASTE1 | asteroid homolog 1 | 0.904 | 1.442 |
| 152195 | NUDT16L2P | nudix hydrolase 16 like 2, pseudogene | -0.928 | 1.699 |
| 131870 | NUDT16 | nudix hydrolase 16 | -0.899 | 3.969 |
| 11222 | MRPL3 | mitochondrial ribosomal protein L3 | -1.007 | 3.638 |
| 105374114 | LOC105374114 | uncharacterized LOC105374114 | -1.069 | 2.491 |
| 23317 | DNAJC13 | DnaJ heat shock protein family (Hsp40) member C13 | 0.907 | 2.19 |
| 100532724 | NPHP3-ACAD11 | NPHP3-ACAD11 readthrough (NMD candidate) | 0.724 | 2.667 |
| 84129 | ACAD11 | acyl-CoA dehydrogenase family member 11 | 0.911 | 3.047 |
| 51554 | ACKR4 | atypical chemokine receptor 4 | 1.496 | 1.748 |
| 79876 | UBA5 | ubiquitin like modifier activating enzyme 5 | 0.912 | 2.62 |
| 11073 | TOPBP1 | DNA topoisomerase II binding protein 1 | 1.051 | 2.611 |
| 339855 | KY | kyphoscoliosis peptidase | 2.346 | 2.431 |
| 5096 | PCCB | propionyl-CoA carboxylase subunit beta | -1.307 | 5.947 |
| 10274 | STAG1 | stromal antigen 1 | 0.424 | 1.72 |
| 105374127 | LOC105374127 | uncharacterized LOC105374127 | 2.204 | 1.71 |
| 105374128 | LOC105374128 | uncharacterized LOC105374128 | 2.987 | 3.958 |
| 199221 | DZIP1L | DAZ interacting zinc finger protein 1 like | 2.488 | 3.877 |
| 51146 | A4GNT | alpha-1,4-N-acetylglucosaminyltransferase | 3.667 | 3.289 |
| 51163 | DBR1 | debranching RNA lariats 1 | 0.835 | 2.162 |
| 25852 | ARMC8 | armadillo repeat containing 8 | 0.631 | 2.381 |
| 347736 | NME9 | NME/NM23 family member 9 | 0.861 | 2.492 |
| 22808 | MRSAS | muscle RAS oncogene homolog | -3.217 | 9.768 |
| 5291 | PIK3CB | phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta | 0.927 | 3.675 |
| 92370 | PXYLP1 | 2-phosphoxyleose phosphatase 1 | 1.556 | 3.211 |
| 5922 | RASA2 | RAS p21 protein activator 2 | 0.537 | 1.508 |
| 483 | ATP1B3 | ATPase Na+/K+ transporting subunit beta 3 | -1.078 | 8.904 |
| 7029 | TFDP2 | transcription factor Dp-2 | 1.867 | 4.207 |
| 545 | ATR | ATR serine/threonine kinase | -1.24 | 14.612 |
| 5357 | PLS1 | plastin 1 | 2.713 | 3.949 |
| 9435 | CHST2 | carbohydrate sulfotransferase 2 | -2.041 | 2.875 |
| 285195 | SLC9A9 | solute carrier family 9 member A9 | -2.262 | 17.835 |
| 2992 | GYG1 | glycogenin 1 | 2.411 | 10.843 |
| 6596 | HLTF | helicase like transcription factor | 0.939 | 2.235 |
| 11342 | RNF13 | ring finger protein 13 | -0.844 | 1.962 |
| 653659 | TMEM183BP | transmembrane protein 183B, pseudogene | 0.579 | 2.089 |
| 83939 | EIF2A | eukaryotic translation initiation factor 2A | -0.729 | 2.413 |
| 51714 | SELENOT | seleoprotein T | 0.355 | 1.372 |
| 116931 | MED12L | mediator complex subunit 12L | 2.104 | 1.554 |
| 53829 | P2RY13 | purinergic receptor P2Y13 | 0.665 | 2.467 |
| 64805 | P2RY12 | purinergic receptor P2Y12 | -2.086 | 4.269 |
| 285313 | IGSF10 | immunoglobulin superfamily member 10 | 1.721 | 1.596 |
| 56670 | SUCNR1 | succinate receptor 1 | 2.795 | 3.128 |
| 401093 | MBNL1-AS1 | MBNL1 antisense RNA 1 | 0.62 | 1.616 |
| 5028 | P2RY1 | purinergic receptor P2Y1 | 1.396 | 1.377 |
| 5912 | RAP2B | RAP2B, member of RAS oncogene family | -0.98 | 2.743 |
| 4311 | MME | membrane metalloendopeptidase | 2.431 | 1.981 |
| 23007 | PLCH1 | phospholipase C eta 1 | 1.912 | 1.563 |
| 285315 | C3orf33 | chromosome 3 open reading frame 33 | 1.727 | 2.447 |
| 25976 | TIPARP | TCDD inducible poly(ADP-ribose) polymerase | 1.332 | 3.558 |
| 107986148 | LOC107986148 | replaced by ID 25976 | 1.309 | 2.387 |
| 101928236 | LOC101928236 | uncharacterized LOC101928236 | 1.43 | 2.086 |
| 79674 | VEPH1 | ventricular zone expressed PH domain containing 1 | 4.233 | 12.78 |
| 5806 | PTX3 | pentraxin 3 | 2.37 | 3.949 |
| 56925 | LXN | latexin | 1.441 | 2.893 |
| 10051 | SMC4 | structural maintenance of chromosomes 4 | 1.729 | 4.128 |
| 286827 | TRIM59 | tripartite motif containing 59 | 1.19 | 1.836 |
| 151742 | PPM1L | protein phosphatase, Mg2+/Mn2+ dependent 1L | -1.247 | 7.384 |
| 8706 | B3GALNT1 | beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group) | 2.325 | 2.143 |
| 101243545 | LINC02067 | long intergenic non-protein coding RNA 2067 | -0.916 | 3.657 |
| 151790 | WDR49 | WD repeat domain 49 | -2.203 | 2.538 |
| 11235 | PDCD10 | programmed cell death 10 | 0.597 | 1.394 |
| 27333 | GOLM4 | golgi integral membrane protein 4 | -0.746 | 1.792 |
| 55892 | MYNN | myoneurin | 0.742 | 1.832 |
| 7095 | SEC62 | SEC62 homolog, preprotein translocation factor | 0.886 | 4.62 |
| 26996 | GPR160 | G protein-coupled receptor 160 | 2.524 | 11.161 |
| 80012 | PHC3 | polyhomeotic homolog 3 | 0.578 | 2.79 |
| 56648 | EIF5A2 | eukaryotic translation initiation factor 5A2 | 1.778 | 2.225 |
| 23043 | TNIK | TRAF2 and NCK interacting kinase | -1.135 | 1.744 |
| 5337 | PLD1 | phospholipase D1 | 1.847 | 5.619 |
| 107986153 | LOC107986153 | TNF superfamily member 10 | 1.167 | 2.255 |
| 8743 | TNFSF10 | neutral cholesterol ester hydrolase 1 | -2.712 | 7.078 |
| 57552 | NCEH1 | epithelial cell transforming 2 | -1.862 | 11.013 |
| 1894 | ECT2 | zinc finger matrin-type 3 | 1.606 | 4.574 |
| 64393 | ZMAT3 | NADH:ubiquinone oxidoreductase subunit B5 | -0.73 | 3.12 |
| 4711 | NDUFB5 | ubiquitin specific peptidase 13 | -0.778 | 4.899 |
| 8975 | USP13 | tetratricopeptide repeat domain 14 | -1.806 | 3.108 |
| 151613 | TTC14 | ATPase phospholipid transporting 11B (putative) | 0.813 | 2.075 |
| 23200 | ATP11B | defective in cullin neddylation 1 domain containing 1 | 1.196 | 5.968 |
| 54165 | DCUN1D1 | MCF-2 cell line derived transforming sequence-like 2 | 0.733 | 2.954 |
| 23101 | MCF2L2 | UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5 | 1.408 | 2.982 |
| 84002 | B3GNT5 | uncharacterized LOC107986160 | 1.045 | 1.419 |
| 107986160 | LOC107986160 | YEATS domain containing 2 | 1.644 | 2.81 |
| 55689 | YEATS2 | MAP6 domain containing 1 | -0.712 | 3.27 |
| 79929 | MAP6D1 | presenilin associated rhomboid like | -1.531 | 1.881 |
| 55486 | PARL | ATP binding cassette subfamily C member 5 | -0.715 | 2.379 |
| 10057 | ABCC5 | presenilin associated rhomboid like | 0.618 | 1.912 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 10195 | ALG3 | ALG3 alpha-1,3- mannosyltransferase | -0.677 | 2.918 |
| 131408 | FAM131A | family with sequence similarity 131 member A | -0.907 | 1.405 |
| 5437 | POLR2H | RNA polymerase II, I and III subunit H | -0.476 | 1.44 |
| 23355 | VPS8 | VPS8 subunit of CORVET complex | 0.811 | 4.458 |
| 285382 | C3orf70 | chromosome 3 open reading frame 70 | 2.852 | 1.486 |
| 59343 | SENP2 | SUMO specific peptidase 2 | 0.904 | 5.515 |
| 10644 | IGF2BP2 | insulin like growth factor 2 mRNA binding protein 2 | -1.613 | 3.088 |
| 6434 | TRA2B | transformer 2 beta homolog | 0.995 | 2.47 |
| 1608 | DGKG | diacylglycerol kinase gamma | 0.964 | 4.559 |
| 5984 | RFC4 | replication factor C subunit 4 | 1.756 | 2.727 |
| 116832 | RPL39L | ribosomal protein L39 like | -1.603 | 2.127 |
| 64108 | RTP4 | receptor transporter protein 4 | -2.732 | 8.584 |
| 604 | BCL6 | BCL6 transcription repressor | 1.194 | 2.408 |
| 105374264 | LOC105374264 | uncharacterized LOC105374264 | 3.66 | 2.83 |
| 339929 | LPP-AS2 | LPP antisense RNA 2 | 1.211 | 2.366 |
| 4026 | LPP | LIM domain containing preferred translocation partner in lipoma | -1.215 | 3.794 |
| 100874043 | TPRG1-AS1 | TPRG1 antisense RNA 1 | -2.16 | 1.611 |
| 107986168 | LOC107986168 | | -2.351 | 1.489 |
| 285386 | TPRG1 | tumor protein p63 regulated 1 | -2.339 | 2.141 |
| 152137 | CCDC50 | coiled-coil domain containing 50 | -2.838 | 3.318 |
| 151963 | MB21D2 | Mab-21 domain containing 2 | -2.399 | 1.653 |
| 79572 | ATP13A3 | ATPase 13A3 | -0.455 | 2.505 |
| 93109 | TMEM44 | transmembrane protein 44 | 2.4 | 4.3 |
| 152002 | XXYL1 | xyloside xylosyltransferase 1 | -1.449 | 5.174 |
| 5504 | PPP1R2 | protein phosphatase 1 regulatory inhibitor subunit 2 | 0.761 | 2.604 |
| 100128262 | TNK2-AS1 | TNK2 antisense RNA 1 | -0.829 | 1.321 |
| 131540 | ZDHHC19 | zinc finger DHHC-type palmitoyltransferase 19 | 3.928 | 5.611 |
| 105374304 | LOC105374304 | uncharacterized LOC105374304 | 3.008 | 5.002 |
| 200931 | SLC51A | solute carrier family 51 subunit alpha | 3.331 | 5.487 |
| 5130 | PCYT1A | phosphate cytidylyltransferase 1A, choline | 0.443 | 2.711 |
| 165918 | RNF168 | ring finger protein 168 | 0.992 | 3.355 |
| 348793 | WDR53 | WD repeat domain 53 | 1.132 | 5.268 |
| 200933 | FBXO45 | F-box protein 45 | 1.912 | 8.253 |
| 375387 | NRROS | negative regulator of reactive oxygen species | -1.513 | 2.45 |
| 100129516 | LINC02012 | long intergenic non-protein coding RNA 2012 | 2.21 | 3.457 |
| 622 | BDH1 | 3-hydroxybutyrate dehydrogenase 1 | 2.385 | 3.76 |
| 112268458 | LOC112268458 | keratinocyte proline-rich protein-like | 1.003 | 1.388 |
| 9711 | RUBCN | rubicon autophagy regulator | -1.078 | 5.685 |
| 100126321 | MIR922 | microRNA 922 | -1.236 | 2.652 |
| 84248 | FYTTD1 | forty-two-three domain containing 1 | -0.5 | 1.709 |
| 728262 | FAM157A | family with sequence similarity 157 member A | 1.834 | 7.366 |
| 255403 | ZNF718 | zinc finger protein 718 | 1.583 | 1.816 |
| 84179 | SLC49A3 | solute carrier family 49 member 3 | -1.25 | 4.713 |
| 10861 | SLC26A1 | solute carrier family 26 member 1 | -1.356 | 2.95 |
| 3425 | IDUA | alpha-L-iduronidase | -1.156 | 2.738 |
| 53834 | FGFRL1 | fibroblast growth factor receptor like 1 | -2.676 | 4.721 |
| 152877 | FAM53A | family with sequence similarity 53 member A | -1.362 | 3.2 |
| 92305 | TMEM129 | transmembrane protein 129, E3 ubiquitin ligase | -0.558 | 1.852 |
| 10460 | TACC3 | transforming acidic coiled-coil containing protein 3 | 0.597 | 1.914 |
| 112268460 | LOC112268460 | uncharacterized LOC112268460 | 0.759 | 4.378 |
| 3954 | LETM1 | leucine zipper and EF-hand containing transmembrane protein 1 | -0.622 | 2.79 |
| 7468 | NSD2 | nuclear receptor binding SET domain protein 2 | 1.177 | 2.393 |
| 7469 | NELFA | negative elongation factor complex member A | -0.409 | 1.433 |
| 10608 | MXD4 | MAX dimerization protein 4 | -0.949 | 2.563 |
| 100616358 | MIR4800 | microRNA 4800 | -1.113 | 1.433 |
| 57732 | ZFYVE28 | zinc finger FYVE-type containing 28 | -2.252 | 2.775 |
| 6452 | SH3BP2 | SH3 domain binding protein 2 | -0.673 | 2.421 |
| 118 | ADD1 | adducin 1 | 0.389 | 1.321 |
| 10227 | MFSD10 | major facilitator superfamily domain containing 10 | 1.696 | 7.122 |
| 8602 | NOP14 | NOP14 nucleolar protein | -0.719 | 3.461 |
| 3064 | HTT | huntingtin | -0.594 | 2.552 |
| 345222 | MSANTD1 | Myb/SANT DNA binding domain containing 1 | -0.729 | 1.5 |
| 6002 | RGS12 | regulator of G protein signaling 12 | -1.991 | 4.692 |
| 4043 | LRPAP1 | LDL receptor related protein associated protein 1 | 0.416 | 1.446 |
| 85013 | TMEM128 | transmembrane protein 128 | -0.54 | 1.686 |
| 55646 | LYAR | Ly1 antibody reactive | -1.356 | 7.124 |
| 27065 | NSG1 | neuronal vesicle trafficking associated 1 | -1.629 | 1.396 |
| 2121 | EVC | Evc ciliary complex subunit 1 | -3.547 | 5.151 |
| 23324 | MAN2B2 | mannosidase alpha class 2B member 2 | -0.448 | 2.228 |
| 93621 | MRFAP1 | Morf4 family associated protein 1 | -0.491 | 1.891 |
| 93622 | LOC93622 | Morf4 family associated protein 1 like 1 | 0.826 | 1.526 |
| 339988 | LINC02481 | long intergenic non-protein coding RNA 2481 | 1.93 | 1.657 |
| 6286 | S100P | S100 calcium binding protein P | 3.386 | 4.774 |
| 80273 | GRPEL1 | GrpE like 1, mitochondrial | 0.521 | 1.382 |
| 105374368 | LOC105374368 | uncharacterized LOC105374368 | 0.774 | 1.377 |
| 57537 | SORCS2 | sortilin related VPS10 domain containing receptor 2 | 1.852 | 1.915 |
| 54436 | SH3TC1 | SH3 domain and tetratricopeptide repeats 1 | -2.46 | 11.947 |
| 105374373 | LOC105374373 | uncharacterized LOC105374373 | 2.964 | 1.575 |
| 112268463 | LOC112268463 | | 3.866 | 4.43 |
| 56606 | SLC2A9 | solute carrier family 2 member 9 | -2.425 | 11.055 |
| 9948 | WDR1 | WD repeat domain 1 | 0.699 | 5.336 |
| 85460 | ZNF518B | zinc finger protein 518B | -0.831 | 1.74 |
| 132864 | CPEB2 | cytoplasmic polyadenylation element binding protein 2 | 1.055 | 1.874 |
| 26234 | FBXL5 | F-box and leucine rich repeat protein 5 | 0.581 | 2.309 |
| 285550 | FAM200B | family with sequence similarity 200 member B | 1.869 | 9.322 |
| 683 | BST1 | bone marrow stromal cell antigen 1 | 1.197 | 4.442 |
| 8842 | PROM1 | prominin 1 | 3.689 | 4.584 |
| 202018 | TAPT1 | transmembrane anterior posterior transformation 1 | 1.533 | 5.579 |
| 107986187 | LOC107986187 | uncharacterized LOC107986187 | 1.326 | 1.713 |
| 5860 | QDPR | quinoid dihydropteridine reductase | -0.999 | 1.778 |
| 51056 | LAP3 | leucine aminopeptidase 3 | -2.772 | 9.506 |
| 80306 | MED28 | mediator complex subunit 28 | 0.483 | 1.654 |
| 27146 | FAM184B | family with sequence similarity 184 member B | 0.649 | 1.557 |
| 64151 | NCAPG | non-SMC condensin I complex subunit G | 2.811 | 3.839 |
| 133015 | PACRGL | parkin coregulated like | -1.042 | 2.536 |
| 91050 | CCDC149 | coiled-coil domain containing 149 | -2.07 | 5.159 |
| 102723675 | LOC102723675 | uncharacterized LOC102723675 | -2.786 | 3.531 |
| 285540 | SEPSECS-AS1 | SEPSECS antisense RNA 1 (head to head) | 2.192 | 3.304 |
| 23231 | SEL1L3 | SEL1L family member 3 | 1.188 | 3.478 |
| 3516 | RBPJ | recombination signal binding protein for immunoglobulin kappa J region | 0.692 | 2.486 |
| 105374545 | LOC105374545 | uncharacterized LOC105374545 | 3.522 | 1.675 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 55296 | TBC1D19 | TBC1 domain family member 19 | 0.919 | 1.54 |
| 57620 | STIM2 | stromal interaction molecule 2 | -0.76 | 2.643 |
| 768211 | RELL1 | RELT like 1 | 1.067 | 2.943 |
| 105374406 | LOC105374406 | uncharacterized LOC105374406 | 3.211 | 2.17 |
| 55276 | PGM2 | phosphoglucomutase 2 | 0.816 | 4.72 |
| 79667 | KLF3-AS1 | KLF3 antisense RNA 1 | -0.822 | 2.729 |
| 51274 | KLF3 | KLF transcription factor 3 | -0.711 | 3.02 |
| 105374413 | LOC105374413 | uncharacterized LOC105374413 | -6.091 | 4.609 |
| 105374412 | LOC105374412 | replaced by ID 105374413 | -4.746 | 5.933 |
| 92689 | FAM114A1 | family with sequence similarity 114 member A1 | -0.916 | 1.906 |
| 51088 | KLHL5 | kelch like family member 5 | -2.528 | 17.636 |
| 105374418 | LOC105374418 | uncharacterized LOC105374418 | -1.683 | 1.815 |
| 57728 | WDR19 | WD repeat domain 19 | -0.932 | 1.385 |
| 399 | RHOH | ras homolog family member H | 2.638 | 6.057 |
| 54502 | RBM47 | RNA binding motif protein 47 | -0.996 | 1.599 |
| 79730 | NSUN7 | NOP2/Sun RNA methyltransferase family member 7 | 2.145 | 3.687 |
| 105374426 | LOC105374426 | uncharacterized LOC105374426 | -2.729 | 2.2 |
| 55161 | TMEM33 | transmembrane protein 33 | -0.485 | 2.197 |
| 10463 | SLC30A9 | solute carrier family 30 member 9 | -0.591 | 1.525 |
| 10396 | ATP8A1 | ATPase phospholipid transporting 8A1 | 1.883 | 4.1 |
| 57205 | ATP10D | ATPase phospholipid transporting 10D (putative) | -1.793 | 26.311 |
| 7006 | TEC | tec protein tyrosine kinase | 1.199 | 2.621 |
| 64854 | USP46 | ubiquitin specific peptidase 46 | -1.37 | 2.519 |
| 152579 | SCFD2 | sec1 family domain containing 2 | -0.918 | 2.992 |
| 26511 | CHIC2 | cysteine rich hydrophobic domain 2 | 0.481 | 2.286 |
| 79644 | SRD5A3 | steroid 5 alpha-reductase 3 | -2.293 | 6.357 |
| 55858 | TMEM165 | transmembrane protein 165 | -0.664 | 1.764 |
| 9575 | CLOCK | clock circadian regulator | -2.301 | 29.518 |
| 84525 | HOPX | HOP homeobox | 2.865 | 6.618 |
| 5978 | REST | RE1 silencing transcription factor | 0.752 | 2.181 |
| 3490 | IGFBP7 | insulin like growth factor binding protein 7 | 0.813 | 1.986 |
| 255130 | IGFBP7-AS1 | IGFBP7 antisense RNA 1 | 0.976 | 2.272 |
| 1060 | CENPC | centromere protein C | 0.877 | 2.773 |
| 27284 | SULT1B1 | sulfotransferase family 1B member 1 | 2.159 | 8.236 |
| 3512 | JCHAIN | joining chain of multimeric IgA and IgM | -2.76 | 3.845 |
| 57050 | UTP3 | UTP3 small subunit processome component | -1.701 | 14.745 |
| 22902 | RUFY3 | RUN and FYVE domain containing 3 | -2.795 | 16.494 |
| 2926 | GRSF1 | G-rich RNA sequence binding factor 1 | -0.974 | 6.533 |
| 92597 | MOB1B | MOB kinase activator 1B | -2.497 | 16.681 |
| 285521 | COX18 | cytochrome c oxidase assembly factor COX18 | -0.9 | 1.743 |
| 26057 | ANKRD17 | ankyrin repeat domain 17 | -0.526 | 3.223 |
| 3576 | CXCL8 | C-X-C motif chemokine ligand 8 | 2.043 | 2.381 |
| 6372 | CXCL6 | C-X-C motif chemokine ligand 6 | 4.114 | 6.638 |
| 2919 | CXCL1 | C-X-C motif chemokine ligand 1 | 3.036 | 6.808 |
| 2921 | CXCL3 | C-X-C motif chemokine ligand 3 | 2.123 | 1.419 |
| 374 | AREG | amphiregulin | 2.795 | 2.979 |
| 25898 | RCHY1 | ring finger and CHY zinc finger domain containing 1 | 1.312 | 6.088 |
| 27163 | NAAA | N-acylethanolamine acid amidase | -2.758 | 10.421 |
| 55153 | SDAD1 | SDA1 domain containing 1 | -1.441 | 6.621 |
| 4283 | CXCL9 | C-X-C motif chemokine ligand 9 | -3.213 | 7.296 |
| 3627 | CXCL10 | C-X-C motif chemokine ligand 10 | -5.555 | 9.526 |
| 950 | SCARB2 | scavenger receptor class B member 2 | -1.539 | 7.366 |
| 100129583 | FAM47E | family with sequence similarity 47 member E | 2.47 | 2.571 |
| 105377286 | LOC105377286 | uncharacterized LOC105377286 | 2.977 | 2.389 |
| 100631383 | FAM47E-STBD1 | FAM47E-STBD1 readthrough | 3.383 | 4.243 |
| 8987 | STBD1 | starch binding domain 1 | 3.445 | 4.837 |
| 55752 | SEPTIN11 | septin 11 | -1.317 | 1.995 |
| 901 | CCNG2 | cyclin G2 | 0.802 | 1.847 |
| 306 | ANXA3 | annexin A3 | 3.5 | 1.902 |
| 100505702 | LINC01094 | long intergenic non-protein coding RNA 1094 | -1.512 | 1.603 |
| 55589 | BMP2K | BMP2 inducible kinase | -0.912 | 3.71 |
| 152559 | PAQR3 | progestin and adipoQ receptor family member 3 | -0.979 | 5.068 |
| 100506035 | LINC00989 | long intergenic non-protein coding RNA 989 | -1.864 | 1.565 |
| 118429 | ANTXR2 | ANTXR cell adhesion molecule 2 | 0.98 | 5.946 |
| 105377303 | PRDM8-AS1 | PRDM8 antisense RNA 1 | 1.625 | 1.397 |
| 56978 | PRDM8 | PR/SET domain 8 | 1.545 | 2.24 |
| 153020 | RASGEF1B | RasGEF domain family member 1B | -1.945 | 2.932 |
| 3184 | HNRNPD | heterogeneous nuclear ribonucleoprotein D | 0.305 | 1.44 |
| 22872 | SEC31A | SEC31 homolog A, COPII coat complex component | -0.513 | 2.594 |
| 132660 | LIN54 | lin-54 DREAM MuvB core complex component | 1.112 | 4.136 |
| 51138 | COPS4 | COP9 signalosome subunit 4 | 0.556 | 1.567 |
| 27235 | COQ2 | coenzyme Q2, prenyltransferase | -0.966 | 4.243 |
| 10855 | HPSE | heparanase | -2.111 | 10.63 |
| 84142 | ABRAXAS1 | abraxas 1, BRCA1 A complex subunit | -0.757 | 4.273 |
| 83478 | ARHGAP24 | Rho GTPase activating protein 24 | 1.367 | 13.757 |
| 105377319 | LOC105377319 | uncharacterized LOC105377319 | 1.319 | 2.21 |
| 100616349 | MIR4451 | microRNA 4451 | 3.45 | 3.164 |
| 5783 | PTPN13 | protein tyrosine phosphatase non-receptor type 13 | -1.895 | 1.434 |
| 53343 | NUDT9 | nudix hydrolase 9 | -1.032 | 2.656 |
| 5311 | PKD2 | polycystin 2, transient receptor potential cation channel | 0.796 | 1.319 |
| 152926 | PPM1K | protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1K | -2.838 | 11.612 |
| 55008 | HERC6 | HECT and RLD domain containing E3 ubiquitin protein ligase family member 6 | -2.834 | 5.998 |
| 102723458 | LOC102723458 | uncharacterized LOC102723458 | -2.921 | 5.258 |
| 51191 | HERC5 | HECT and RLD domain containing E3 ubiquitin protein ligase 5 | -2.921 | 2.649 |
| 10144 | FAM13A | family with sequence similarity 13 member A | -0.906 | 2.627 |
| 285513 | GPRIN3 | GPRIN family member 3 | -1.573 | 2.226 |
| 6622 | SNCA | synuclein alpha | -1.482 | 1.71 |
| 401145 | CCSER1 | coiled-coil serine rich protein 1 | 1.709 | 3.097 |
| 56916 | SMARCA1 | SWI/SNF-related, matrix-associated actin-dependent regulator of chromatin, subfamily a, containing DEAD/H box 1 | -1.063 | 2.449 |
| 8649 | LAMTOR3 | late endosomal/lysosomal adaptor, MAPK and MTOR activator 3 | 1.016 | 3.605 |
| 3015 | H2AZ1 | H2A.Z variant histone 1 | 1.389 | 4.876 |
| 115265 | DDIT4L | DNA damage inducible transcript 4 like | 7.682 | 5.095 |
| 5530 | PPP3CA | protein phosphatase 3 catalytic subunit alpha | 0.619 | 3.682 |
| 90024 | FLJ20021 | uncharacterized LOC90024 | 0.844 | 1.546 |
| 55024 | BANK1 | B cell scaffold protein with ankyrin repeats 1 | -1.758 | 1.668 |
| 64116 | SLC39A8 | solute carrier family 39 member 8 | 1.815 | 6.677 |
| 493856 | CISD2 | CDGSH iron sulfur domain 2 | -0.729 | 1.713 |
| 1062 | CENPE | centromere protein E | 2.724 | 3.433 |
| 79807 | GSTCD | glutathione S-transferase C-terminal domain containing | 1.166 | 2.294 |
| 101929595 | CYP2U1-AS1 | CYP2U1 and SGMS2 antisense RNA 1 | 1.667 | 3.348 |
| 113612 | CYP2U1 | cytochrome P450 family 2 subfamily U member 1 | -3.793 | 14.913 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 51176 | LEF1 | lymphoid enhancer binding factor 1 | -5.368 | 8.544 |
| 6164 | RPL34 | ribosomal protein L34 | -0.592 | 1.72 |
| 55013 | MCUB | mitochondrial calcium uniporter dominant negative subunit beta | -2.797 | 16.571 |
| 107986302 | LOC107986302 | | -3.057 | 2.633 |
| 79071 | ELOVL6 | ELOVL fatty acid elongase 6 | 1.395 | 1.359 |
| 132720 | FAM241A | family with sequence similarity 241 member A | -0.826 | 2.9 |
| 55435 | AP1AR | adaptor related protein complex 1 associated regulatory protein | -1.546 | 9.926 |
| 92610 | TIFA | TRAF interacting protein with forkhead associated domain | 1.961 | 5.28 |
| 80216 | ALPK1 | alpha kinase 1 | 1.917 | 6.928 |
| 55345 | ZGRF1 | zinc finger GRF-type containing 1 | 1.674 | 2.561 |
| 817 | CAMK2D | calcium/calmodulin dependent protein kinase II delta | -4.571 | 15.712 |
| 8492 | PRSS12 | serine protease 12 | 2.571 | 2.507 |
| 9871 | SEC24D | SEC24 homolog D, COPII coat complex component | -0.639 | 1.336 |
| 401149 | LINC01061 | long intergenic non-protein coding RNA 1061 | 1.05 | 1.348 |
| 4085 | MAD2L1 | mitotic arrest deficient 2 like 1 | 2.938 | 3.235 |
| 11107 | PRDM5 | PR/SET domain 5 | 3.251 | 3.52 |
| 308 | ANXA5 | annexin A5 | -0.888 | 3.11 |
| 890 | CCNA2 | cyclin A2 | 3.181 | 4.049 |
| 84162 | BLTP1 | bridge-like lipid transfer protein family member 1 | 0.786 | 2.706 |
| 10252 | SPRY1 | sprouty RTK signaling antagonist 1 | 2.032 | 5.313 |
| 57182 | ANKRD50 | ankyrin repeat domain containing 50 | -0.777 | 2.368 |
| 22824 | HSPA4L | heat shock protein family A (Hsp70) member 4 like | 2.605 | 2.335 |
| 10733 | PLK4 | polo like kinase 4 | 2.836 | 4.116 |
| 79960 | JADE1 | jade family PHD finger 1 | 0.984 | 3.813 |
| 132320 | SCLT1 | sodium channel and clathrin linker 1 | -0.642 | 2.65 |
| 132321 | C4orf33 | chromosome 4 open reading frame 33 | -0.893 | 3.142 |
| 23657 | SLC7A11 | solute carrier family 7 member 11 | 1.793 | 1.312 |
| 25819 | NOCT | nocturnin | 2.106 | 8.049 |
| 1998 | ELF2 | E74 like ETS transcription factor 2 | 0.563 | 2.048 |
| 105377449 | LOC105377449 | | 2.071 | 5.254 |
| 107984036 | RAB33B-AS1 | RAB33B antisense RNA 1 | 2 | 4.895 |
| 83452 | RAB33B | RAB33B, member RAS oncogene family | 1.757 | 6.522 |
| 80854 | SETD7 | SET domain containing 7, histone lysine methyltransferase | -2.022 | 3.796 |
| 4258 | MGST2 | microsomal glutathione S-transferase 2 | -0.848 | 2.907 |
| 255520 | ELMOD2 | ELMO domain containing 2 | 0.527 | 2.084 |
| 23158 | TBC1D9 | TBC1 domain family member 9 | -2.453 | 6.176 |
| 644962 | TNRC18P1 | trinucleotide repeat containing 18 pseudogene 1 | -2.859 | 3.233 |
| 27309 | ZNF330 | zinc finger protein 330 | -0.596 | 1.375 |
| 100507639 | LINC02432 | long intergenic non-protein coding RNA 2432 | -4.105 | 4.598 |
| 3600 | IL15 | interleukin 15 | -2.834 | 11.556 |
| 8821 | INPP4B | inositol polyphosphate-4-phosphatase type II B | -2.36 | 2.149 |
| 2996 | GYPE | glycophorin E (MNS blood group) | -2.808 | 3.395 |
| 6059 | ABCE1 | ATP binding cassette subfamily E member 1 | -1.034 | 2.327 |
| 4086 | SMAD1 | SMAD family member 1 | -2.179 | 12.494 |
| 104326058 | SMAD1-AS1 | SMAD1 antisense RNA 1 | -2.04 | 2.931 |
| 166785 | MMAA | metabolism of cobalamin associated A | -0.842 | 2.054 |
| 152485 | ZNF827 | zinc finger protein 827 | -2.579 | 2.092 |
| 90826 | PRMT9 | protein arginine methyltransferase 9 | 1.334 | 3.714 |
| 4306 | NR3C2 | nuclear receptor subfamily 3 group C member 2 | -4.147 | 5.597 |
| 987 | LRBA | LPS responsive beige-like anchor protein | -0.498 | 1.322 |
| 729830 | FHIP1A | FHF complex subunit HOOK interacting protein 1A | 2.21 | 2.363 |
| 5188 | GATB | glutamyl-tRNA amidotransferase subunit B | -0.933 | 3.938 |
| 55294 | FBXW7 | F-box and WD repeat domain containing 7 | -0.375 | 1.782 |
| 102191832 | FBXW7-AS1 | FBXW7 antisense RNA 1 | -0.827 | 1.488 |
| 54553 | MIR4453HG | MIR4453 host gene | 0.838 | 1.376 |
| 303 | ANXA2P1 | annexin A2 pseudogene 1 | -2.145 | 2.829 |
| 84057 | MND1 | meiotic nuclear divisions 1 | 3.101 | 2.118 |
| 100419170 | LOC100419170 | toll like receptor 2 pseudogene | -4.07 | 5.223 |
| 2982 | GUCY1A1 | guanylate cyclase 1 soluble subunit alpha 1 | -2.23 | 2.462 |
| 1519 | CTSO | cathepsin O | -2.849 | 12.929 |
| 56034 | PDGFC | platelet derived growth factor C | -1.027 | 1.73 |
| 51313 | GASK1B | golgi associated kinase 1B | -2.088 | 2.253 |
| 285505 | GASK1B-AS1 | GASK1B antisense RNA 1 | -2.103 | 2.443 |
| 101928007 | LOC101928007 | uncharacterized LOC101928007 | -3.204 | 2.962 |
| 55314 | TMEM144 | transmembrane protein 144 | -0.959 | 1.71 |
| 201725 | C4orf46 | chromosome 4 open reading frame 46 | 1.562 | 4.279 |
| 2110 | ETFDH | electron transfer flavoprotein dehydrogenase | 0.921 | 3.181 |
| 5481 | PPID | peptidylprolyl isomerase D | 0.602 | 1.556 |
| 57600 | FNIP2 | folliculin interacting protein 2 | -1.518 | 7.533 |
| 55319 | TMA16 | translation machinery associated 16 homolog | -0.942 | 2.583 |
| 55016 | MARCHF1 | membrane associated ring-CH-type finger 1 | -2.385 | 13.574 |
| 201931 | TMEM192 | transmembrane protein 192 | -0.941 | 3.682 |
| 11275 | KLHL2 | kelch like family member 2 | 0.898 | 2.191 |
| 6307 | MSMO1 | methylsterol monooxygenase 1 | 1.59 | 3.454 |
| 55601 | DDX60 | DExD/H-box helicase 60 | -2.768 | 2.809 |
| 91351 | DDX60L | DExD/H-box 60 like | -1.507 | 1.961 |
| 23022 | PALLD | palladin, cytoskeletal associated protein | -2.561 | 3.96 |
| 1182 | CLCN3 | chloride voltage-gated channel 3 | -0.726 | 2.55 |
| 9848 | MFAP3L | microfibril associated protein 3 like | 1.326 | 1.797 |
| 3148 | HMGB2 | high mobility group box 2 | 2.596 | 7.973 |
| 80817 | CEP44 | centrosomal protein 44 | 1.473 | 6.186 |
| 3248 | HPGD | 15-hydroxyprostaglandin dehydrogenase | 2.847 | 1.588 |
| 116966 | WDR17 | WD repeat domain 17 | -3.635 | 10.788 |
| 1635 | DCTD | dCMP deaminase | -1.388 | 9.69 |
| 80014 | WWC2 | WW and C2 domain containing 2 | -2.041 | 12.288 |
| 55602 | CDKN2AIP | CDKN2A interacting protein | 1.357 | 2.228 |
| 3622 | ING2 | inhibitor of growth family member 2 | 0.997 | 4.251 |
| 56977 | STOX2 | storkhead box 2 | 2.219 | 1.466 |
| 728175 | LINC02363 | long intergenic non-protein coding RNA 2363 | 3.266 | 6.877 |
| 102723766 | LOC102362 | long intergenic non-protein coding RNA 2362 | 1.903 | 1.973 |
| 836 | CASP3 | caspase 3 | 0.809 | 2.963 |
| 79682 | CENPU | centromere protein U | 2.574 | 2.858 |
| 643036 | SLED1 | proteoglycan 3, pro eosinophil major basic protein 2 pseudogene | 1.467 | 1.715 |
| 291 | SLC25A4 | solute carrier family 25 member 4 | -3.409 | 2.573 |
| 57587 | CFAP97 | cilia and flagella associated protein 97 | -2.409 | 9.566 |
| 83891 | SNX25 | sorting nexin 25 | -2.586 | 3.089 |
| 55325 | UFSP2 | UFM1 specific peptidase 2 | -1.258 | 5.971 |
| 285440 | CYP4V2 | cytochrome P450 family 4 subfamily V member 2 | -1.787 | 2.029 |
| 6389 | SDHA | succinate dehydrogenase complex flavoprotein subunit A | -0.537 | 2.697 |
| 55722 | CEP72 | centrosomal protein 72 | 1.066 | 2.127 |
| 9319 | TRIP13 | thyroid hormone receptor interactor 13 | 2.984 | 3.893 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|---------------|--|----------|----------|
| 10723 | SLC12A7 | solute carrier family 12 member 7 | -3.882 | 8.851 |
| 728609 | SDHAP3 | SDHA pseudogene 3 | -0.941 | 1.451 |
| 54888 | NSUN2 | NOP2/Sun RNA methyltransferase 2 | -0.419 | 1.815 |
| 6715 | SRD5A1 | steroid 5 alpha-reductase 1 | -1.404 | 6.024 |
| 10299 | MARCHF6 | membrane associated ring-CH-type finger 6 | 0.67 | 3.144 |
| 83853 | ROPN1L | rhophilin associated tail protein 1 like | 3.607 | 12.452 |
| 105369214 | LOC105369214 | | 3.66 | 8.09 |
| 651746 | ANKRD33B | ankyrin repeat domain 33B | 2.482 | 3.477 |
| 7204 | TRIO | trio Rho guanine nucleotide exchange factor | -1.334 | 6.63 |
| 54491 | OTULINL | OTU deubiquitinase with linear linkage specificity like | 1.029 | 6.583 |
| 56172 | ANKH | ANKH inorganic pyrophosphate transport regulator | -1.134 | 2.534 |
| 54463 | RETREG1 | reticulophagy regulator 1 | -1.328 | 1.385 |
| 4651 | MYO10 | myosin X | 0.796 | 1.671 |
| 285696 | BASP1-AS1 | BASP1 antisense RNA 1 | 4.488 | 9.126 |
| 10409 | BASP1 | brain abundant membrane attached signal protein 1 | 2.275 | 6.438 |
| 101929544 | LINC02217 | long intergenic non-protein coding RNA 2217 | 2.99 | 2.575 |
| 55322 | C5orf22 | chromosome 5 open reading frame 22 | -0.607 | 1.853 |
| 54545 | MTMR12 | myotubularin related protein 12 | -1.281 | 10.497 |
| 51663 | ZFR | zinc finger RNA binding protein | -0.463 | 1.366 |
| 23600 | AMACR | alpha-methylacyl-CoA racemase | 1.838 | 5.239 |
| 100534612 | C1QTNF3-AMACR | C1QTNF3-AMACR readthrough (NMD candidate) | 1.696 | 5.424 |
| 114899 | C1QTNF3 | C1q and TNF related 3 | 1.081 | 2.491 |
| 5618 | PRLR | prolactin receptor | -5.415 | 15.498 |
| 3575 | IL7R | interleukin 7 receptor | -4.811 | 6.007 |
| 167127 | UGT3A2 | UDP glycosyltransferase family 3 member A2 | 2.678 | 1.632 |
| 6502 | SKP2 | S-phase kinase associated protein 2 | 0.97 | 2.697 |
| 65250 | CPLANE1 | ciliogenesis and planar polarity effector complex subunit 1 | -0.518 | 1.438 |
| 1601 | DAB2 | DAB adaptor protein 2 | -1.35 | 6.321 |
| 5562 | PRKAA1 | protein kinase AMP-activated catalytic subunit alpha 1 | 1.796 | 8.439 |
| 5019 | OXCT1 | 3-oxoacid CoA-transferase 1 | 1.245 | 1.321 |
| 105374746 | LOC105374746 | uncharacterized LOC105374746 | 1.008 | 4.667 |
| 389289 | ANXA2R | annexin A2 receptor | 0.955 | 3.013 |
| 56477 | CCL28 | C-C motif chemokine ligand 28 | 2.241 | 2.973 |
| 133418 | EMB | embigin | 2.49 | 7.197 |
| 53918 | PELO | pelota mRNA surveillance and ribosome rescue factor | 1.799 | 5.005 |
| 4338 | MOCS2 | molybdenum cofactor synthesis 2 | -1.074 | 4.476 |
| 4724 | NDUFS4 | NADH:ubiquinone oxidoreductase subunit S4 | -0.594 | 2.748 |
| 54622 | ARL15 | ADP ribosylation factor like GTPase 15 | -1.086 | 3.713 |
| 8611 | PLPP1 | phospholipid phosphatase 1 | -0.847 | 1.33 |
| 153129 | SLC38A9 | solute carrier family 38 member 9 | -0.815 | 3.551 |
| 133396 | IL31RA | interleukin 31 receptor A | -3.917 | 10.872 |
| 3572 | IL6ST | interleukin 6 cytokine family signal transducer | -2.093 | 6.975 |
| 4214 | MAP3K1 | mitogen-activated protein kinase kinase kinase 1 | -1.306 | 6.792 |
| 105378980 | LOC105378980 | uncharacterized LOC105378980 | -0.975 | 2.282 |
| 133383 | SETD9 | SET domain containing 9 | -0.479 | 1.416 |
| 5144 | PDE4D | phosphodiesterase 4D | 2.136 | 4.512 |
| 107986348 | LOC107986348 | | 2.718 | 2.494 |
| 105378988 | LOC105378988 | uncharacterized LOC105378988 | 3.388 | 2.618 |
| 55789 | DEPDC1B | DEP domain containing 1B | 3.014 | 3.113 |
| 1161 | ERCC8 | ERCC excision repair 8, CSA ubiquitin ligase complex subunit | -0.949 | 1.346 |
| 91942 | NDUFAF2 | NADH:ubiquinone oxidoreductase complex assembly factor 2 | -1.247 | 3.322 |
| 57688 | ZSWIM6 | zinc finger SWIM-type containing 6 | -1.619 | 8.305 |
| 27292 | DIMT1 | DIM1 rRNA methyltransferase and ribosome maturation factor | -0.9 | 1.939 |
| 100130733 | LRRC70 | leucine rich repeat containing 70 | 1.996 | 3.097 |
| 285672 | SREK1IP1 | SREK1 interacting protein 1 | 0.577 | 2.366 |
| 64105 | CENPK | centromere protein K | 2.4 | 3.179 |
| 57486 | NLN | neurolysin | -2.308 | 14.894 |
| 55914 | ERBIN | erbB2 interacting protein | -0.712 | 1.891 |
| 140890 | SREK1 | splicing regulatory glutamic acid and lysine rich protein 1 | 0.632 | 1.334 |
| 375449 | MAST4 | microtubule associated serine/threonine kinase family member 4 | 1.685 | 1.761 |
| 4064 | CD180 | CD180 molecule | -2.665 | 10.948 |
| 891 | CCNB1 | cyclin B1 | 2.543 | 2.925 |
| 64946 | CENPH | centromere protein H | 1.547 | 1.392 |
| 1022 | CDK7 | cyclin dependent kinase 7 | 0.805 | 3.165 |
| 202243 | CCDC125 | coiled-coil domain containing 125 | 3.514 | 18.892 |
| 100506658 | OCLN | occludin | 1.63 | 1.698 |
| 653188 | GUSBP3 | GUSB pseudogene 3 | 1.048 | 2.55 |
| 105369228 | LOC105369228 | uncharacterized LOC105369228 | 1.228 | 1.897 |
| 728492 | SERF1B | small EDRK-rich factor 1B | 1.575 | 3.368 |
| 107986372 | LOC107986372 | mitochondrial import receptor subunit TOM5 homolog | 1.339 | 1.409 |
| 11039 | GUSBP14 | GUSB pseudogene 14 | 0.873 | 2.249 |
| 653238 | GTF2H2B | general transcription factor IIH subunit 2B (pseudogene) | 0.989 | 1.511 |
| 653080 | GUSBP16 | GUSB pseudogene 16 | 1.067 | 2.307 |
| 8293 | SERF1A | small EDRK-rich factor 1A | 1.633 | 3.448 |
| 107986373 | LOC107986373 | mitochondrial import receptor subunit TOM5 homolog | 1.339 | 1.409 |
| 4671 | NAIP | NLR family apoptosis inhibitory protein | -1.012 | 2.269 |
| 647859 | OCLNP1 | OCLN pseudogene 1 | 1.985 | 1.443 |
| 100049076 | GUSBP17 | GUSB pseudogene 17 | 0.845 | 1.591 |
| 105379016 | LOC105379016 | uncharacterized LOC105379016 | 2.457 | 3.329 |
| 64087 | MCCC2 | methylcrotonyl-CoA carboxylase subunit 2 | -1.239 | 5.494 |
| 167465 | ZNF366 | zinc finger protein 366 | -1.673 | 2.483 |
| 3842 | TNPO1 | transportin 1 | 0.743 | 3.327 |
| 107986383 | LOC107986383 | uncharacterized LOC107986383 | 2.173 | 2.781 |
| 3074 | HEXB | hexosaminidase subunit beta | -0.971 | 7.748 |
| 10087 | CERT1 | ceramide transporter 1 | 0.441 | 1.989 |
| 170591 | S100Z | S100 calcium binding protein Z | -1.873 | 3.671 |
| 84327 | ZBED3 | zinc finger BED-type containing 3 | -2.662 | 6.253 |
| 8622 | PDE8B | phosphodiesterase 8B | -1.316 | 1.414 |
| 6902 | TBCA | tubulin folding cofactor A | 0.543 | 2.121 |
| 9522 | SCAMP1 | secretory carrier membrane protein 1 | -0.825 | 3.394 |
| 133746 | JMY | junction mediating and regulatory protein, p53 cofactor | -1.088 | 3.14 |
| 7060 | THBS4 | thrombospondin 4 | 3.057 | 1.493 |
| 256987 | SERINC5 | serine incorporator 5 | -1.267 | 6.266 |
| 9765 | ZFYVE16 | zinc finger FYVE-type containing 16 | 0.819 | 3.693 |
| 167555 | FAM151B | family with sequence similarity 151 member B | 1.917 | 5.637 |
| 340120 | ANKRD34B | ankyrin repeat domain 34B | 3.236 | 1.387 |
| 1719 | DHFR | dihydrofolate reductase | 2.346 | 2.928 |
| 4437 | MSH3 | mutS homolog 3 | 0.923 | 1.691 |
| 23635 | SSBP2 | single stranded DNA binding protein 2 | -1.198 | 5.091 |
| 153339 | TMEM167A | transmembrane protein 167A | -0.44 | 2.675 |
| 1462 | VCAN | versican | -1.66 | 3.02 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 107986431 | LOC107986431 | VCAN antisense RNA 1 | -1.947 | 2.562 |
| 105379054 | VCAN-AS1 | RAS p21 protein activator 1 | -1.825 | 2.539 |
| 5921 | RASA1 | MEF2C antisense RNA 2 | 0.519 | 1.449 |
| 109729137 | MEF2C-AS2 | MEF2C antisense RNA 2C | -3.079 | 16.717 |
| 4208 | MEF2C | myocyte enhancer factor 2C | -3.081 | 29.115 |
| 107986361 | LOC107986361 | LysM domain containing 3 | -2.903 | 6.498 |
| 116068 | LYSMD3 | ARRDC3 antisense RNA 1 | 0.568 | 1.393 |
| 100129716 | ARRDC3-AS1 | KIAA0825 | 0.892 | 2.049 |
| 285600 | KIAA0825 | SMC5-SMC6 complex localization factor 1 | 2.944 | 19.826 |
| 84250 | SLF1 | glutaredoxin | 0.934 | 3.064 |
| 2745 | GLRX | uncharacterized LOC102724720 | 0.675 | 2.379 |
| 102724720 | LOC102724720 | long intergenic non-protein coding RNA 1554 | 3.771 | 20.864 |
| 202299 | LINC01554 | elongation factor for RNA polymerase II 2 | 4.103 | 12.511 |
| 22936 | ELL2 | endoplasmic reticulum aminopeptidase 2 | 1.715 | 7.076 |
| 64167 | ERAP2 | repulsive guidance molecule BMP co-receptor b | -2.018 | 1.544 |
| 285704 | RGMB | solute carrier organic anion transporter family member 4C1 | -5.542 | 4.072 |
| 353189 | SLCO4C1 | peptidylglycine alpha-amidating monooxygenase | 2.845 | 4.812 |
| 5066 | PAM | macrophage immunometabolism regulator | 2.169 | 7.58 |
| 90355 | MACIR | nudix hydrolase 12 | 3.996 | 9.145 |
| 83594 | NUDT12 | F-box and leucine rich repeat protein 17 | -2.553 | 2.766 |
| 64839 | FBXL17 | FER tyrosine kinase | 0.565 | 1.795 |
| 2241 | FER | praia ring finger ubiquitin ligase 2 | -1.773 | 9.584 |
| 9867 | PJA2 | mannosidase alpha class 2A member 1 | 0.437 | 1.544 |
| 4124 | MAN2A1 | erythrocyte membrane protein band 4.1 like 4A | -0.884 | 3.415 |
| 64097 | EPB41L4A | EPB41L4A antisense RNA 1 | -1.065 | 2.367 |
| 114915 | EPB41L4A-AS1 | signal recognition particle 19 | -1.085 | 3.082 |
| 6728 | SRP19 | protein geranylgeranyltransferase type I subunit beta | 0.708 | 1.579 |
| 5229 | PGGT1B | coiled-coil domain containing 112 | -0.521 | 2.508 |
| 153733 | CCDC112 | fem-1 homolog C | -0.684 | 1.395 |
| 56929 | FEM1C | TMED7-TICAM2 readthrough | 1.044 | 2.226 |
| 100302736 | TMED7-TICAM2 | TIR domain containing adaptor molecule 2 | -1.067 | 6.315 |
| 353376 | TICAM2 | transmembrane p24 trafficking protein 7 | -1.779 | 11.204 |
| 51014 | TMED7 | adaptor related protein complex 3 subunit sigma 1 | -0.541 | 1.381 |
| 1176 | AP3S1 | laeverin | 1.655 | 5.743 |
| 206338 | LVRN | semaphorin 6A | 2.807 | 1.406 |
| 57556 | SEMA6A | SEMA6A antisense RNA 1 | 1.471 | 3.915 |
| 101927233 | SEMA6A-AS1 | DTW domain containing 2 | 1.093 | 1.451 |
| 285605 | DTWD2 | Dmx like 1 | 2.801 | 12.852 |
| 1657 | DMXL1 | TNF alpha induced protein 8 | -0.518 | 2.512 |
| 25816 | TNFAIP8 | serum response factor binding protein 1 | 1.149 | 6.989 |
| 153443 | SRFBP1 | sorting nexin 2 | -0.794 | 1.81 |
| 6643 | SNX2 | zinc finger protein 608 | -1.195 | 11.025 |
| 57507 | ZNF608 | GRAM domain containing 2B | 5.089 | 7.052 |
| 65983 | GRAMD2B | SLC12A2 divergent transcript | -1.88 | 2.608 |
| 644873 | SLC12A2-DT | solute carrier family 12 member 2 | 1.018 | 1.822 |
| 6558 | SLC12A2 | Rap guanine nucleotide exchange factor 6 | 1.603 | 1.867 |
| 51735 | RAPGEF6 | folliculin interacting protein 1 | 0.953 | 4.509 |
| 96459 | FNIP1 | solute carrier family 22 member 4 | 0.573 | 1.776 |
| 6583 | SLC22A4 | solute carrier family 22 member 5 | 1.143 | 3.295 |
| 6584 | SLC22A5 | IRF1 antisense RNA 1 | -1.665 | 2.968 |
| 441108 | IRF1-AS1 | long intergenic non-protein coding RNA 2863 | -0.995 | 1.337 |
| 102723741 | LINC02863 | RAD50 double strand break repair protein | 1.171 | 1.99 |
| 10111 | RAD50 | kinesin family member 3A | -0.676 | 2.075 |
| 11127 | KIF3A | septin 8 | -1.697 | 2.547 |
| 23176 | SEPTIN8 | shroom family member 1 | -2.057 | 5.301 |
| 134549 | SHROOM1 | chromosome 5 open reading frame 15 | -2.977 | 2.416 |
| 56951 | C5orf15 | voltage dependent anion channel 1 | -0.674 | 2.022 |
| 7416 | VDAC1 | transcription factor 7 | -1.002 | 15.815 |
| 6932 | TCF7 | cyclin dependent kinase like 3 | -3.709 | 6.645 |
| 51265 | CDKL3 | ubiquitin conjugating enzyme E2 B | 0.517 | 1.307 |
| 7320 | UBE2B | jade family PHD finger 2 | 0.827 | 4.081 |
| 23338 | JADE2 | thioredoxin domain containing 15 | -2.172 | 10.956 |
| 79770 | TXNDC15 | dendritic cell associated nuclear protein 1 | -0.991 | 3.51 |
| 140947 | DCANP1 | TIFA inhibitor | -5.536 | 4.806 |
| 497189 | TIFAB | uncharacterized LOC105379189 | -6.233 | 8.951 |
| 105379189 | LOC105379189 | transforming growth factor beta induced | -2.865 | 4.897 |
| 7045 | TGFB1 | SPARC (osteonectin), cwcw and kazal like domains proteoglycan 1 | -2.902 | 10.339 |
| 6695 | SPOCK1 | kinesin family member 20A | -2.619 | 5.001 |
| 10112 | KIF20A | cell division cycle 25C | 3.037 | 1.631 |
| 995 | CDC25C | family with sequence similarity 53 member C | 1.76 | 5.334 |
| 51307 | FAM53C | early growth response 1 | 1.027 | 3.76 |
| 1958 | EGR1 | eukaryotic translation termination factor 1 | -1.772 | 2.049 |
| 2107 | ETF1 | catenin alpha 1 | 0.655 | 1.559 |
| 1495 | CTNNA1 | small nucleolar RNA host gene 4 | -1.575 | 3.824 |
| 724102 | SNHG4 | marginal zone B and B1 cell specific protein | -1.498 | 1.788 |
| 51237 | MZB1 | endothelial cell surface expressed chemotaxis and apoptosis regulator | -1.864 | 1.501 |
| 641700 | ECSCR | CXXC finger protein 5 | 2.839 | 1.673 |
| 51523 | CXXC5 | purine rich element binding protein A | -1.617 | 1.646 |
| 5813 | PURA | cysteine rich transmembrane module containing 1 | -1.248 | 4.766 |
| 84418 | CYSTM1 | heparin binding EGF like growth factor | 3.179 | 5.54 |
| 1839 | HBEGF | amyloid beta precursor protein binding family B member 3 | -1.515 | 2.893 |
| 10307 | APBB3 | solute carrier family 35 member A4 | -1.017 | 2.677 |
| 113829 | SLC35A4 | transmembrane and coiled-coil domains 6 | -0.835 | 6.096 |
| 55374 | TMC06 | CD14 | -0.413 | 1.781 |
| 929 | TAF7 | CD14 molecule | -1.955 | 2.986 |
| 6879 | TAF7 | TATA-box binding protein associated factor 7 | 0.896 | 8.883 |
| 285613 | RELL2 | RELT like 2 | -0.801 | 1.58 |
| 51294 | PCDH12 | protocadherin 12 | -1.061 | 1.414 |
| 10007 | GNPDA1 | glucosamine-6-phosphate deaminase 1 | -0.633 | 3.177 |
| 80762 | NDFIP1 | Nedd4 family interacting protein 1 | -0.889 | 8.077 |
| 81545 | FBXO38 | F-box protein 38 | 0.455 | 1.798 |
| 154 | ADRB2 | adrenoceptor beta 2 | 1.326 | 2.667 |
| 134266 | GRPEL2 | GrpE like 2, mitochondrial | 0.867 | 1.839 |
| 133522 | PPARGC1B | PPARG coactivator 1 beta | -2.673 | 10.083 |
| 1436 | CSF1R | colony stimulating factor 1 receptor | -3.461 | 12.768 |
| 5159 | PDGFRB | platelet derived growth factor receptor beta | -3.899 | 6.216 |
| 105378226 | LOC105378226 | uncharacterized LOC105378226 | -2.601 | 2.637 |
| 6949 | TCOF1 | treacle ribosome biogenesis factor 1 | -2.064 | 11.898 |
| 972 | CD74 | CD74 molecule | -3.604 | 16.67 |
| 11346 | SYNPO | synaptopodin | -4.162 | 3.522 |
| 85027 | SMIM3 | small integral membrane protein 3 | 0.879 | 5.995 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 309 | ANXA6 | annexin A6 | 0.834 | 1.399 |
| 26112 | CCDC69 | coiled-coil domain containing 69 | -1.042 | 1.685 |
| 105378230 | LOC105378230 | uncharacterized LOC105378230 | -1.155 | 1.425 |
| 2760 | GM2A | ganglioside GM2 activator | -0.965 | 1.375 |
| 206358 | SLC36A1 | solute carrier family 36 member 1 | 0.75 | 2.007 |
| 10827 | FAM114A2 | family with sequence similarity 114 member A2 | 0.74 | 2.762 |
| 4238 | MFAP3 | microfibril associated protein 3 | 1.675 | 6.567 |
| 84868 | HAVCR2 | hepatitis A virus cellular receptor 2 | -2.349 | 6.719 |
| 3702 | ITK | IL2 inducible T cell kinase | -4.188 | 4.329 |
| 26999 | CYFIP2 | cytoplasmic FMR1 interacting protein 2 | 1.611 | 6.321 |
| 54974 | THG1L | tRNA-histidine guanylyltransferase 1 like | -2.336 | 7.948 |
| 9685 | CLINT1 | clathrin interactor 1 | 1.429 | 14.25 |
| 1879 | EBF1 | EBF transcription factor 1 | -2.108 | 1.758 |
| 153830 | RNF145 | ring finger protein 145 | 0.653 | 1.915 |
| 105377682 | LINC01932 | long intergenic non-protein coding RNA 1932 | 5.005 | 7.426 |
| 134510 | UBLCP1 | ubiquitin like domain containing CTD phosphatase 1 | 0.804 | 2.429 |
| 79616 | CCNJL | cyclin J like | 3.266 | 5.001 |
| 9232 | PTTG1 | PTTG1 regulator of sister chromatid separation, securin | 2.654 | 4.105 |
| 3161 | HMMR | hyaluronan mediated motility receptor | 2.727 | 2.462 |
| 101927813 | HMMR-AS1 | HMMR antisense RNA 1 | 2.999 | 1.705 |
| 27430 | MAT2B | methionine adenosyltransferase 2B | -0.841 | 1.334 |
| 5917 | RARS1 | arginyl-tRNA synthetase 1 | -0.688 | 1.915 |
| 54908 | SPDL1 | spindle apparatus coiled-coil protein 1 | 1.16 | 1.684 |
| 1794 | DOCK2 | dedicator of cytokinesis 2 | -0.626 | 2.477 |
| 100128059 | LOC100128059 | uncharacterized LOC100128059 | -1.753 | 1.745 |
| 257358 | LINC01366 | long intergenic non-protein coding RNA 1366 | 1.31 | 1.476 |
| 3779 | KCNMB1 | potassium calcium-activated channel subfamily M regulatory beta subunit 1 | -3.106 | 8.886 |
| 101928033 | KCNIP1-OT1 | KCNIP1 overlapping transcript 1 | -2.977 | 2.615 |
| 1843 | DUSP1 | dual specificity phosphatase 1 | -1.19 | 1.552 |
| 105377735 | LOC105377735 | biorientation of chromosomes in cell division 1 | -2.033 | 1.926 |
| 91272 | BOD1 | uncharacterized LOC107986482 | -1.393 | 4.923 |
| 107986482 | LOC107986482 | cytoplasmic polyadenylation element binding protein 4 | 1.835 | 2.089 |
| 80315 | CPEB4 | sideroflexin 1 | 0.939 | 9.406 |
| 94081 | SFXN1 | histamine receptor H2 | 2.366 | 9.457 |
| 3274 | HRH2 | THO complex subunit 3 | 0.492 | 3.739 |
| 84321 | THOC3 | KIAA1191 | -1.255 | 6.906 |
| 57179 | KIAA1191 | ADP ribosylation factor like GTPase 10 | -0.518 | 2.604 |
| 285598 | ARL10 | NOP16 nucleolar protein | -1.159 | 2.876 |
| 51491 | NOP16 | HIG1 hypoxia inducible domain family member 2A | -1.1 | 3.72 |
| 192286 | HIGD2A | cadherin related family member 2 | -1.191 | 4.219 |
| 112267951 | LOC112267951 | tetraspanin 17 | 0.929 | 1.729 |
| 54825 | CDHR2 | hexokinase 3 | 2.772 | 9.928 |
| 26262 | TSPAN17 | ubiquitin interaction motif containing 1 | -1.704 | 6.108 |
| 3101 | HK3 | PRELI domain containing 1 | 1.353 | 10.907 |
| 51720 | UIMC1 | regulator of G protein signaling 14 | 0.496 | 1.787 |
| 27166 | PRELID1 | solute carrier family 34 member 1 | -1.198 | 4.741 |
| 10636 | RGS14 | coagulation factor XII | 0.814 | 5.205 |
| 6569 | SLC34A1 | G protein-coupled receptor kinase 6 | 2.827 | 1.738 |
| 2161 | F12 | PRR7 antisense RNA 1 | 2.713 | 12.333 |
| 2870 | GRK6 | proline rich 7, synaptic | 1.326 | 13.15 |
| 340037 | PRR7-AS1 | drebrin 1 | 1.341 | 5.759 |
| 80758 | PRR7 | PDZ and LIM domain 7 | 1.654 | 11.194 |
| 1627 | DBN1 | docking protein 3 | 1.455 | 2.135 |
| 9260 | PDLM7 | family with sequence similarity 193 member B | 1.125 | 2.92 |
| 79930 | DOK3 | THO complex 3 pseudogene | 1.124 | 5.418 |
| 54540 | FAM193B | heterogeneous nuclear ribonucleoprotein A/B | 0.515 | 1.744 |
| 107986488 | LOC107986488 | 5-phosphohydroxy-L-lysine phospho-lyase | 0.708 | 1.596 |
| 728554 | LOC728554 | collagen type XXIII alpha 1 chain | -1.144 | 4.097 |
| 3182 | HNRPAB | CDC like kinase 4 | 0.731 | 2.558 |
| 85007 | PHYKPL | ADAM metallopeptidase with thrombospondin type 1 motif 2 | 0.429 | 2.284 |
| 91522 | COL23A1 | uncharacterized LOC105377763 | 2.697 | 11.566 |
| 105377756 | LOC105377756 | heterogeneous nuclear ribonucleoprotein H1 | 3.272 | 2.97 |
| 57396 | CLK4 | alpha-1,3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase B | 0.82 | 1.507 |
| 9509 | ADAMTS2 | sequestosome 1 | 7.682 | 6.276 |
| 3187 | HNRNPH1 | ring finger protein 130 | 0.546 | 1.444 |
| 105377763 | LOC105377763 | mitogen-activated protein kinase 9 | 2.054 | 1.852 |
| 11282 | MGAT4B | alpha-1,3-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase | 0.428 | 2.251 |
| 8878 | SQSTM1 | hepatocellular carcinoma up-regulated EZH2-associated long non-coding RNA | -0.683 | 1.789 |
| 55819 | RNF130 | long intergenic non-protein coding RNA 847 | -0.849 | 2.001 |
| 5601 | MAPK9 | butyrophilin like 8 | 0.524 | 1.938 |
| 4245 | MGAT1 | butyrophilin like 3 | -0.714 | 2.531 |
| 100859930 | HEIH | tripartite motif containing 7 | -0.52 | 1.369 |
| 729678 | LINC00847 | tripartite motif containing 41 | -0.83 | 3.61 |
| 79908 | BTNL8 | small nucleolar RNA, C/D box 96A | 3.545 | 11.567 |
| 10917 | BTNL3 | uncharacterized LOC101928649 | 2.98 | 2.001 |
| 81786 | TRIM7 | tripartite motif containing 41 | -1.419 | 1.771 |
| 90933 | TRIM41 | tripartite motif containing 52 | 0.907 | 5.082 |
| 619571 | SNORD96A | uncharacterized LOC105377771 | 0.794 | 1.554 |
| 101928649 | CTC-338M12.4 | interferon regulatory factor 4 | 1.242 | 7.332 |
| 84851 | TRIM52 | exocyst complex component 2 | 0.938 | 4.332 |
| 105377771 | LOC105377771 | forkhead box C1 | 1.275 | 3.287 |
| 107986495 | LOC107986495 | GDP-mannose 4,6-dehydratase | 1.379 | 3.579 |
| 100132062 | LOC100132062 | GMDS divergent transcript | 1.181 | 4.232 |
| 3662 | IRF4 | serpin family B member 1 | -3.12 | 12.479 |
| 55770 | EXOC2 | SERPINB9 antisense RNA 1 | -0.518 | 1.893 |
| 2296 | FOXC1 | serpin family B member 9 | 3.408 | 2.943 |
| 2762 | GMDS | N-ribosylidihydronicotinamide:quinone reductase 2 | -0.676 | 2.473 |
| 100508120 | GMDS-DT | uncharacterized LOC101927759 | 0.705 | 1.835 |
| 1992 | SERPINB1 | biphenyl hydrolase like | 1.589 | 7.551 |
| 101927730 | SERPINB9-AS1 | proteasome assembly chaperone 4 | -1.656 | 3.9 |
| 5272 | SERPINB9 | solute carrier family 22 member 23 | -2.01 | 6.059 |
| 4835 | NQO2 | testis expressed 56, pseudogene | 2.182 | 12.187 |
| 101927759 | LOC101927759 | enoyl-CoA delta isomerase 2 | 1.52 | 2.895 |
| 670 | BPHL | chromodomain Y like | -2.804 | 8.605 |
| 389362 | PSMG4 | LYRM4 antisense RNA 1 | -0.651 | 2.639 |
| 63027 | SLC22A23 | LYRM4 motif containing 4 | -2.015 | 2.457 |
| 404220 | TEX56P | testis expressed 56, pseudogene | -2.435 | 5.311 |
| 10455 | ECI2 | enoyl-CoA delta isomerase 2 | -2.404 | 8.916 |
| 9425 | CDYL | chromodomain Y like | -0.855 | 3.888 |
| 100129461 | LYRM4-AS1 | LYRM4 antisense RNA 1 | -2.142 | 1.757 |
| 57128 | LYRM4 | LYRM4 motif containing 4 | -1.627 | 6.516 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|----------------|--|----------|----------|
| 10667 | FARS2 | phenylalanyl-tRNA synthetase 2, mitochondrial | -0.614 | 1.636 |
| 105374898 | LOC105374898 | uncharacterized LOC105374898 | 2.657 | 2.428 |
| 51299 | NRN1 | neuritin 1 | 3.407 | 5.144 |
| 2162 | F13A1 | coagulation factor XIII A chain | -1.734 | 3.951 |
| 9450 | LY86 | lymphocyte antigen 86 | -3.183 | 5.301 |
| 101928004 | LOC101928004 | uncharacterized LOC101928004 | 1.537 | 2.912 |
| 101928047 | LOC101928047 | uncharacterized LOC101928047 | 1.595 | 1.856 |
| 105374903 | LOC105374903 | uncharacterized LOC105374903 | 2.668 | 2.688 |
| 105374902 | LINC03055 | long intergenic non-protein coding RNA 3055 | 1.913 | 3.333 |
| 6745 | SSR1 | signal sequence receptor subunit 1 | -0.365 | 1.384 |
| 100526837 | EEF1E1-BLOC1S5 | EEF1E1-BLOC1S5 readthrough (NMD candidate) | 0.668 | 1.492 |
| 9521 | EEF1E1 | eukaryotic translation elongation factor 1 epsilon 1 | 1.162 | 2.624 |
| 100124533 | SCARNA27 | small Cajal body-specific RNA 27 | 1.924 | 1.554 |
| 2651 | GCNT2 | glucosaminyl (N-acetyl) transferase 2 (I blood group) | -2.293 | 10.19 |
| 3096 | HIVEP1 | HIVEP zinc finger 1 | -0.517 | 1.773 |
| 1906 | EDN1 | endothelin 1 | 2.447 | 1.517 |
| 54438 | GFOD1 | glucose-fructose oxidoreductase domain containing 1 | 1.323 | 3.21 |
| 105374937 | LOC105374937 | uncharacterized LOC105374937 | 2.876 | 4.196 |
| 23408 | SIRT5 | sirtuin 5 | 1.827 | 6.423 |
| 105374938 | LOC105374938 | uncharacterized LOC105374938 | 1.62 | 4.103 |
| 51406 | NOL7 | nucleolar protein 7 | 0.63 | 1.978 |
| 10048 | RANBP9 | RAN binding protein 9 | 1.432 | 5.851 |
| 9308 | CD83 | CD83 molecule | -2.384 | 5.291 |
| 84062 | DTNBP1 | dystrobrevin binding protein 1 | -0.615 | 1.465 |
| 2766 | GMPR | guanosine monophosphate reductase | -3.265 | 4.678 |
| 6310 | ATXN1 | ataxin 1 | 0.807 | 5.573 |
| 101928433 | ATXN1-AS1 | ATXN1 antisense RNA 1 | 1.648 | 3.674 |
| 51439 | FAM8A1 | family with sequence similarity 8 member A1 | 1.522 | 3.751 |
| 7172 | TPMT | thiopurine S-methyltransferase | -0.909 | 2.513 |
| 1871 | E2F3 | E2F transcription factor 3 | 0.741 | 3.526 |
| 6659 | SOX4 | SRY-box transcription factor 4 | -2.489 | 10.29 |
| 57380 | MRS2 | magnesium transporter MRS2 | -0.734 | 2.435 |
| 51053 | GMNN | geminin DNA replication inhibitor | 2.49 | 3.011 |
| 105374981 | LOC105374981 | uncharacterized LOC105374981 | 1.346 | 1.538 |
| 55604 | CARMIL1 | capping protein regulator and myosin 1 linker 1 | -2.609 | 5.013 |
| 10475 | TRIM38 | tripartite motif containing 38 | -0.647 | 2.251 |
| 108783645 | HFE-AS1 | HFE antisense RNA 1 | -1.822 | 1.373 |
| 3077 | HFE | homeostatic iron regulator | -2.345 | 5.959 |
| 3008 | H1-4 | H1.4 linker histone, cluster member | 1.062 | 1.738 |
| 11118 | BTN3A2 | butyrophilin subfamily 3 member A2 | -1.928 | 4.055 |
| 10385 | BTN2A2 | butyrophilin subfamily 2 member A2 | -1.716 | 5.534 |
| 11119 | BTN3A1 | butyrophilin subfamily 3 member A1 | -1.32 | 1.372 |
| 54718 | BTN2A3P | butyrophilin subfamily 2 member A3, pseudogene | -1.754 | 3.479 |
| 10384 | BTN3A3 | butyrophilin subfamily 3 member A3 | -2.725 | 8.934 |
| 493812 | HCG11 | HLA complex group 11 | -1.193 | 1.416 |
| 85236 | H2BC12 | H2B clustered histone 12 | 1.029 | 2.412 |
| 7738 | ZNF184 | zinc finger protein 184 | 1.376 | 2.217 |
| 100129195 | ZSCAN16-AS1 | ZSCAN16 antisense RNA 1 | 0.661 | 1.537 |
| 80345 | ZSCAN16 | zinc finger and SCAN domain containing 16 | -1.047 | 2.398 |
| 64288 | ZSCAN31 | zinc finger and SCAN domain containing 31 | 1.893 | 2.943 |
| 9753 | ZSCAN12 | zinc finger and SCAN domain containing 12 | -0.928 | 3.369 |
| 7932 | OR2H2 | olfactory receptor family 2 subfamily H member 2 | 1.625 | 3.024 |
| 3134 | HLA-F | major histocompatibility complex, class I, F | -1.162 | 2.111 |
| 56658 | TRIM39 | tripartite motif containing 39 | 0.975 | 3.694 |
| 202658 | TRIM39-RPP21 | TRIM39-RPP21 readthrough | 0.575 | 1.652 |
| 80742 | PRR3 | proline rich 3 | -1.074 | 3.606 |
| 28973 | MRPS18B | mitochondrial ribosomal protein S18B | -1.109 | 5.713 |
| 79969 | ATAT1 | alpha tubulin acetyltransferase 1 | 0.819 | 2.503 |
| 221545 | C6orf136 | chromosome 6 open reading frame 136 | 0.532 | 1.511 |
| 11270 | NRM | nurim | 0.471 | 2.221 |
| 9656 | MDC1 | mediator of DNA damage checkpoint 1 | 1.199 | 2.984 |
| 106478956 | MDC1-AS1 | MDC1 antisense RNA 1 | 1.108 | 2.202 |
| 10211 | FLOT1 | flotillin 1 | 1.308 | 5.531 |
| 401247 | LINC00243 | long intergenic non-protein coding RNA 243 | 1.718 | 1.457 |
| 780 | DDR1 | discoidin domain receptor tyrosine kinase 1 | -1.844 | 2.454 |
| 6941 | TCF19 | transcription factor 19 | 2.319 | 2.608 |
| 5460 | POU5F1 | POU class 5 homeobox 1 | 2.272 | 4.588 |
| 253018 | HCG27 | HLA complex group 27 | 2.142 | 4.894 |
| 101929072 | MICA-AS1 | MICA antisense RNA 1 | 0.906 | 1.918 |
| 199 | AIF1 | allograft inflammatory factor 1 | -1.621 | 14.708 |
| 58496 | LY6G5B | lymphocyte antigen 6 family member G5B | 0.767 | 1.558 |
| 105375018 | LOC105375018 | uncharacterized LOC105375018 | 1.025 | 2.047 |
| 105375020 | LOC105375020 | uncharacterized LOC105375020 | 1.417 | 2.015 |
| 100532732 | MSH5-SAPCD1 | MSH5-SAPCD1 readthrough (NMD candidate) | 0.926 | 2.608 |
| 4439 | MSH5 | mutS homolog 5 | 0.846 | 2.259 |
| 401251 | SAPCD1 | suppressor APC domain containing 1 | 1.413 | 1.897 |
| 80737 | VWA7 | von Willebrand factor A domain containing 7 | 0.88 | 1.315 |
| 7407 | VARS1 | valyl-tRNA synthetase 1 | -0.674 | 3.395 |
| 3305 | HSPA1L | heat shock protein family A (Hsp70) member 1 like | 2.091 | 15.308 |
| 3303 | HSPA1A | heat shock protein family A (Hsp70) member 1A | 1.675 | 4.566 |
| 3304 | HSPA1B | heat shock protein family A (Hsp70) member 1B | 1.66 | 4.653 |
| 50854 | SNHG32 | small nucleolar RNA host gene 32 | -0.729 | 1.949 |
| 10919 | EHMT2 | chromatic histone lysine methyltransferase 2 | -0.592 | 3.238 |
| 717 | C2 | complement C2 | -3.459 | 15.118 |
| 629 | CFB | complement factor B | -1.426 | 2.05 |
| 1797 | DXO | decapping exoribonuclease | 0.885 | 3.558 |
| 177 | AGER | advanced glycosylation end-product specific receptor | 0.717 | 1.878 |
| 63940 | GPSM3 | G protein signaling modulator 3 | 0.8 | 3.554 |
| 4855 | NOTCH4 | notch receptor 4 | -2.042 | 6.978 |
| 3122 | HLA-DRA | major histocompatibility complex, class II, DR alpha | -3.771 | 13.213 |
| 3127 | HLA-DRB5 | major histocompatibility complex, class II, DR beta 5 | -4.217 | 12.05 |
| 3128 | HLA-DRB6 | major histocompatibility complex, class II, DR beta 6 (pseudogene) | -2.97 | 12.679 |
| 3123 | HLA-DRB1 | major histocompatibility complex, class II, DR beta 1 | -3.963 | 16.434 |
| 107986589 | LOC107986589 | major histocompatibility complex, class II, DR beta 1 | -5.719 | 16.088 |
| 3117 | HLA-DQA1 | major histocompatibility complex, class II, DQ alpha 1 | -5.477 | 12.823 |
| 3119 | HLA-DQB1 | major histocompatibility complex, class II, DQ beta 1 | -3.921 | 4.93 |
| 106480429 | HLA-DQB1-AS1 | HLA-DQB1 antisense RNA 1 | -4.313 | 2.812 |
| 3118 | HLA-DQA2 | major histocompatibility complex, class II, DQ alpha 2 | -5.196 | 7.282 |
| 3120 | HLA-DQB2 | major histocompatibility complex, class II, DQ beta 2 | -4.17 | 8.062 |
| 3112 | HLA-DOB | major histocompatibility complex, class II, DO beta | -2.422 | 8.673 |
| 6891 | TAP2 | transporter 2, ATP binding cassette subfamily B member | -1.42 | 5.047 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 5696 | PSMB8 | proteasome 20S subunit beta 8 | -0.591 | 1.616 |
| 6890 | TAP1 | transporter 1, ATP binding cassette subfamily B member | -1.183 | 1.563 |
| 5698 | PSMB9 | proteasome 20S subunit beta 9 | -1.338 | 2.015 |
| 100294145 | LOC100294145 | uncharacterized LOC100294145 | 0.725 | 2.59 |
| 3109 | HLA-DMB | major histocompatibility complex, class II, DM beta | -3.715 | 8.673 |
| 3108 | HLA-DMA | major histocompatibility complex, class II, DM alpha | -3.164 | 12.872 |
| 6046 | BRD2 | bromodomain containing 2 | 0.618 | 1.455 |
| 3111 | HLA-DOA | major histocompatibility complex, class II, DO alpha | -5.86 | 12.142 |
| 3113 | HLA-DPA1 | major histocompatibility complex, class II, DP alpha 1 | -4.487 | 14.976 |
| 3115 | HLA-DPB1 | major histocompatibility complex, class II, DP beta 1 | -4.382 | 11.877 |
| 6015 | RING1 | ring finger protein 1 | -0.516 | 2.719 |
| 6222 | RPS18 | ribosomal protein S18 | -0.931 | 4.068 |
| 9277 | WDR46 | WD repeat domain 46 | -0.5 | 2.575 |
| 5863 | RGL2 | ral guanine nucleotide dissociation stimulator like 2 | 1.012 | 6.296 |
| 3833 | KIFC1 | kinesin family member C1 | 3.019 | 3.267 |
| 5252 | PHF1 | PHD finger protein 1 | 0.856 | 2.132 |
| 8831 | SYNGAP1 | synaptic Ras GTPase activating protein 1 | -1.222 | 3.9 |
| 3710 | ITPR3 | inositol 1,4,5-trisphosphate receptor type 3 | -2.298 | 5.482 |
| 64771 | ILRUN | inflammation and lipid regulator with UBA-like and NBR1-like domains | -0.503 | 2.014 |
| 54887 | BLTP3A | bridge-like lipid transfer protein family member 3A | -0.393 | 1.772 |
| 50619 | DEF6 | DEF6 guanine nucleotide exchange factor | 0.629 | 2.508 |
| 5467 | PPARD | peroxisome proliferator activated receptor delta | -1.422 | 4.209 |
| 2178 | FANCE | FA complementation group E | 1.537 | 3.376 |
| 4736 | RPL10A | ribosomal protein L10a | -0.621 | 1.504 |
| 221481 | ARMC12 | armadillo repeat containing 12 | 1.665 | 1.564 |
| 6732 | SRPK1 | SRSF protein kinase 1 | 2.627 | 9.741 |
| 116369 | SLC26A8 | solute carrier family 26 member 8 | 2.673 | 3.172 |
| 105375035 | LOC105375035 | uncharacterized LOC105375035 | 2.882 | 7.399 |
| 105375034 | LOC105375034 | uncharacterized LOC105375034 | 2.635 | 3 |
| 1432 | MAPK14 | mitogen-activated protein kinase 14 | 1.627 | 10.412 |
| 5603 | MAPK13 | mitogen-activated protein kinase 13 | 1.998 | 3.49 |
| 27154 | BRPF3 | bromodomain and PH finger containing 3 | 1.128 | 5.976 |
| 105375036 | LOC105375036 | uncharacterized LOC105375036 | 2.258 | 2.607 |
| 285848 | PNPLA1 | patatin like phospholipase domain containing 1 | 2.561 | 8.976 |
| 222658 | KCTD20 | potassium channel tetramerization domain containing 20 | -0.608 | 1.572 |
| 11329 | STK38 | serine/threonine kinase 38 | 0.408 | 1.817 |
| 101154753 | PANDAR | promoter of CDKN1A antisense DNA damage activated RNA | -2.871 | 6.088 |
| 1026 | CDKN1A | cyclin dependent kinase inhibitor 1A | -2.073 | 3.43 |
| 401258 | RAB44 | RAB44, member RAS oncogene family | 2.178 | 7.014 |
| 221472 | FGD2 | FYVE, RhoGEF and PH domain containing 2 | -2.862 | 31.799 |
| 221468 | TMEM217 | transmembrane protein 217 | 1.588 | 4.787 |
| 55633 | TBC1D22B | TBC1 domain family member 22B | 1.016 | 3.218 |
| 23070 | CMTR1 | cap methyltransferase 1 | -0.903 | 1.678 |
| 8645 | KCNK5 | potassium two pore domain channel subfamily K member 5 | 2.998 | 2.666 |
| 23500 | DAAM2 | dishevelled associated activator of morphogenesis 2 | 6.02 | 5.362 |
| 100505635 | DAAM2-AS1 | DAAM2 antisense RNA 1 | 6.582 | 8.338 |
| 4337 | MOCS1 | molybdenum cofactor synthesis 1 | 5.841 | 9.461 |
| 222643 | UNC5CL | unc-5 family C-terminal like | -1.24 | 2.389 |
| 222642 | TSPO2 | translocator protein 2 | -1.785 | 1.977 |
| 4800 | NFYA | nuclear transcription factor Y subunit alpha | 0.639 | 1.819 |
| 221442 | ADCY10P1 | ADCY10 pseudogene 1 | 1.014 | 2.383 |
| 79865 | TREML2 | triggering receptor expressed on myeloid cells like 2 | 2.386 | 7.906 |
| 285852 | TREML4 | triggering receptor expressed on myeloid cells like 4 | -1.272 | 1.511 |
| 116113 | FOXP4 | forkhead box P4 | -1.527 | 7.279 |
| 29964 | PRICKLE4 | prickle planar cell polarity protein 4 | 1.771 | 6.961 |
| 25862 | USP49 | ubiquitin specific peptidase 49 | 0.876 | 3.081 |
| 9477 | MED20 | mediator complex subunit 20 | 0.742 | 1.981 |
| 896 | CCND3 | cyclin D3 | 1.424 | 5.005 |
| 107986596 | LOC107986596 | uncharacterized LOC107986596 | 2.016 | 2.089 |
| 6903 | TBCC | tubulin folding cofactor C | 0.738 | 2.765 |
| 401261 | LOC401261 | uncharacterized LOC401261 | 0.718 | 1.796 |
| 171558 | PTCRA | pre T cell antigen receptor alpha | -1.293 | 1.325 |
| 107080644 | CNPY3-GNMT | CNPY3-GNMT readthrough | -0.484 | 1.455 |
| 9820 | CUL7 | cullin 7 | 0.481 | 1.687 |
| 10591 | DNPH1 | 2'-deoxy nucleoside 5'-phosphate N-hydrolyase 1 | -2.6 | 10.022 |
| 401262 | CRIP3 | cysteine rich protein 3 | 2.149 | 10.41 |
| 57510 | XPO5 | exportin 5 | -0.787 | 3.975 |
| 55168 | MRPS18A | mitochondrial ribosomal protein S18A | -0.564 | 1.476 |
| 105375070 | LOC105375070 | uncharacterized LOC105375070 | 2.023 | 1.377 |
| 64928 | MRPL14 | mitochondrial ribosomal protein L14 | -0.964 | 3.127 |
| 3326 | HSP90AB1 | heat shock protein 90 alpha family class B member 1 | -1.138 | 7.954 |
| 347734 | SLC35B2 | solute carrier family 35 member B2 | -0.734 | 1.686 |
| 4794 | NFKBIE | NFKB inhibitor epsilon | -1.647 | 2.88 |
| 860 | RUNX2 | RUNX family transcription factor 2 | 1.157 | 7.638 |
| 53405 | CLIC5 | chloride intracellular channel 5 | 2.866 | 4.984 |
| 22875 | ENPP4 | ectonucleotide pyrophosphatase/phosphodiesterase 4 | 3.107 | 5.785 |
| 221400 | TDRD6 | tudor domain containing 6 | -4.29 | 4.62 |
| 7941 | PLA2G7 | phospholipase A2 group VII | -4.412 | 35.483 |
| 23607 | CD2AP | CD2 associated protein | -1.869 | 4.575 |
| 6005 | RHAG | Rh associated glycoprotein | 6.92 | 2.916 |
| 7180 | CRISP2 | cysteine rich secretory protein 2 | 3.202 | 3.005 |
| 10321 | CRISP3 | cysteine rich secretory protein 3 | 3.19 | 1.902 |
| 4172 | MCM3 | minichromosome maintenance complex component 3 | 1.188 | 1.712 |
| 28978 | TMEM14A | transmembrane protein 14A | 2.259 | 2.418 |
| 125050 | RN7SK | RNA component of 7SK nuclear ribonucleoprotein | 0.897 | 2.705 |
| 26268 | FBXO9 | F-box protein 9 | 1.881 | 8.423 |
| 60481 | ELOVL5 | ELOVL fatty acid elongase 5 | 1.12 | 6.174 |
| 647190 | RPS16P5 | ribosomal protein S16 pseudogene 5 | 1.004 | 1.517 |
| 2729 | GCLC | glutamate-cysteine ligase catalytic subunit | -0.93 | 3.805 |
| 55227 | LRRC1 | leucine rich repeat containing 1 | 1.762 | 1.918 |
| 667 | DST | dystonin | -4.334 | 33.667 |
| 55788 | LMBRD1 | LMBR1 domain containing 1 | -1.013 | 4.391 |
| 57579 | FAM135A | family with sequence similarity 135 member A | -2.257 | 13.438 |
| 135154 | SDHAF4 | succinate dehydrogenase complex assembly factor 4 | 1.09 | 4.224 |
| 79627 | OGFRL1 | opioid growth factor receptor like 1 | -0.627 | 1.504 |
| 56479 | KCNQ5 | potassium voltage-gated channel subfamily Q member 5 | 2.894 | 4.735 |
| 80759 | KHDC1 | KH domain containing 1 | 2.736 | 2.44 |
| 26503 | SLC17A5 | solute carrier family 17 member 5 | 0.713 | 2.053 |
| 9324 | HMGN3 | high mobility group nucleosomal binding domain 3 | -1.902 | 8.69 |
| 100288198 | HMGN3-AS1 | HMGN3 antisense RNA 1 | -1.92 | 8.777 |
| 7272 | TTK | TTK protein kinase | 3.425 | 1.391 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 55603 | TENT5A | terminal nucleotidyltransferase 5A | 1.395 | 2.092 |
| 25998 | IBTK | inhibitor of Bruton tyrosine kinase | -0.853 | 2.385 |
| 23033 | DOP1A | DOP1 leucine zipper like protein A | -0.52 | 1.86 |
| 112611 | RWDD2A | RWD domain containing 2A | -2.549 | 4.626 |
| 23036 | ZNF292 | zinc finger protein 292 | 0.645 | 2.436 |
| 57150 | SMIM8 | small integral membrane protein 8 | 2.042 | 8.224 |
| 206412 | C6orf163 | chromosome 6 open reading frame 163 | 2.574 | 8.251 |
| 63914 | LINC01590 | long intergenic non-protein coding RNA 1590 | 2.745 | 5.804 |
| 8732 | RNGTT | RNA guanylyltransferase and 5'-phosphatase | 0.623 | 2.198 |
| 135293 | PM20D2 | peptidase M20 domain containing 2 | 0.956 | 1.48 |
| 51465 | UBE2J1 | ubiquitin conjugating enzyme E2 J1 | 0.758 | 1.884 |
| 58528 | RRAGD | Ras related GTP binding D | 1.982 | 6.889 |
| 22881 | ANKRD6 | ankyrin repeat domain 6 | 1.148 | 3.751 |
| 23195 | MDN1 | midasin AAA ATPase 1 | -0.657 | 3.821 |
| 60468 | BACH2 | BTB domain and CNC homolog 2 | -5.566 | 6.312 |
| 253714 | MMS22L | MMS22 like, DNA repair protein | 1.668 | 2.561 |
| 26235 | FBXL4 | F-box and leucine rich repeat protein 4 | 0.854 | 3.096 |
| 57531 | HACE1 | HECT domain and ankyrin repeat containing E3 ubiquitin protein ligase 1 | 0.919 | 1.968 |
| 5550 | PREP | prolyl endopeptidase | -0.363 | 1.361 |
| 639 | PRDM1 | PR/SET domain 1 | -1.783 | 2.737 |
| 11231 | SEC63 | SEC63 homolog, protein translocation regulator | 1.231 | 9.015 |
| 28962 | OSTM1 | osteoclastogenesis associated transmembrane protein 1 | -0.521 | 1.513 |
| 8724 | SNX3 | sorting nexin 3 | 1.288 | 7.326 |
| 84071 | ARMC2 | armadillo repeat containing 2 | 0.698 | 1.635 |
| 27244 | SESN1 | sestrin 1 | 2.039 | 4.012 |
| 221262 | CCDC162P | coiled-coil domain containing 162, pseudogene | 2.93 | 3.199 |
| 101927538 | LOC101927538 | | 1.991 | 2.108 |
| 8763 | CD164 | CD164 molecule | 1.164 | 3.287 |
| 285755 | PPI6 | peptidylprolyl isomerase like 6 | 0.976 | 1.401 |
| 64780 | MICAL1 | microtubule associated monooxygenase, calponin and LIM domain containing 1 | 1.314 | 7.795 |
| 221264 | AK9 | adenylate kinase 9 | 1.151 | 4.196 |
| 9896 | FIG4 | FIG4 phosphoinositide 5-phosphatase | 0.441 | 1.363 |
| 8528 | DDO | D-aspartate oxidase | -1.93 | 3.454 |
| 85413 | SLC22A16 | solute carrier family 22 member 16 | 1.408 | 2.705 |
| 105377938 | LOC105377938 | uncharacterized LOC105377938 | 2.875 | 7.167 |
| 84154 | RPF2 | ribosome production factor 2 homolog | -0.987 | 3.194 |
| 5980 | REV3L | REV3 like, DNA directed polymerase zeta catalytic subunit | -0.469 | 1.361 |
| 10758 | TRAF3IP2 | TRAF3 interacting protein 2 | 1.144 | 3.774 |
| 2534 | FYN | FYN proto-oncogene, Src family tyrosine kinase | -2.469 | 10.939 |
| 105377945 | LOC105377945 | uncharacterized LOC105377945 | -2.396 | 11.376 |
| 102724646 | LOC102724646 | uncharacterized LOC102724646 | -2.26 | 3.877 |
| 4082 | MARCKS | myristoylated alanine rich protein kinase C substrate | -0.79 | 1.699 |
| 285758 | MROCKI | MARCKS cis regulating lncRNA promoter of cytokines and inflammation | 2.588 | 2.145 |
| 222537 | HS3ST5 | heparan sulfate-glucosamine 3-sulfotransferase 5 | 2.659 | 1.747 |
| 23270 | TSPYL4 | TSPY like 4 | 1.067 | 2.462 |
| 29940 | DSE | dermatan sulfate epimerase | -1.759 | 6.228 |
| 441168 | CALHM6 | calcium homeostasis modulator family member 6 | -1.96 | 5.523 |
| 221302 | ZUP1 | zinc finger containing ubiquitin peptidase 1 | 1.031 | 1.988 |
| 3841 | KPNA5 | karyopherin subunit alpha 5 | -1.694 | 9.044 |
| 285761 | DCBLD1 | discoidin, CUB and LCCL domain containing 1 | -1.374 | 2.672 |
| 387119 | CEP85L | centrosomal protein 85 like | -1.44 | 11.981 |
| 7955 | RNF217-AS1 | RNF217 antisense RNA 1 (head to head) | 1.194 | 2.37 |
| 154214 | RNF217 | ring finger protein 217 | 1.012 | 3.592 |
| 60487 | TRMT11 | tRNA methyltransferase 11 homolog | -1.151 | 2.881 |
| 387103 | CENPW | centromere protein W | 1.758 | 3.423 |
| 55862 | ECHDC1 | ethylmalonyl-CoA decarboxylase 1 | -0.878 | 2.895 |
| 387357 | THEMIS | thymocyte selection associated | -2.627 | 1.311 |
| 154075 | SAMD3 | sterile alpha motif domain containing 3 | -1.999 | 2.784 |
| 2037 | EPB41L2 | erythrocyte membrane protein band 4.1 like 2 | -3.491 | 13.65 |
| 9465 | AKAP7 | A-kinase anchoring protein 7 | -1.409 | 4.701 |
| 383 | ARG1 | arginase 1 | 3.679 | 2.457 |
| 9439 | MED23 | mediator complex subunit 23 | 0.408 | 1.333 |
| 79541 | OR2A4 | olfactory receptor family 2 subfamily A member 4 | 2.086 | 1.426 |
| 643854 | CTAGE9 | CTAGE family member 9 | 2.604 | 2.666 |
| 8876 | VNN1 | vanin 1 | 2.845 | 6.989 |
| 116843 | SLC18B1 | solute carrier family 18 member B1 | -4.46 | 25.153 |
| 6206 | RPS12 | ribosomal protein S12 | -0.756 | 3.316 |
| 6446 | SGK1 | serum/glucocorticoid regulated kinase 1 | -2.578 | 4.223 |
| 10767 | HBS1L | HBS1 like translational GTPase | 0.635 | 2.102 |
| 4602 | MYB | MYB proto-oncogene, transcription factor | 2.469 | 2.796 |
| 105378011 | LOC105378011 | uncharacterized LOC105378011 | 2.265 | 1.633 |
| 54806 | AHI1 | Abelson helper integration site 1 | -1.159 | 1.969 |
| 27115 | PDE7B | phosphodiesterase 7B | -3.182 | 2.768 |
| 113115 | MTFR2 | mitochondrial fission regulator 2 | 2.354 | 4.869 |
| 107986649 | LOC107986649 | | -1.433 | 1.784 |
| 105378020 | LINC02528 | long intergenic non-protein coding RNA 2528 | -4.435 | 5.474 |
| 23593 | HEBP2 | heme binding protein 2 | 0.588 | 2.652 |
| 57224 | NHS1 | NHS like 1 | -2.401 | 8.76 |
| 441172 | NHS1L-AS1 | NHS1L antisense RNA 1 | -1.86 | 2.03 |
| 167838 | TXLNB | taxilin beta | -0.921 | 1.321 |
| 10370 | CITED2 | Cbp/p300 interacting transactivator with Glu/Asp rich carboxy-terminal domain 2 | 1.119 | 3.198 |
| 3097 | HIVEP2 | HIVEP zinc finger 2 | -1.581 | 1.691 |
| 51390 | AIG1 | androgen induced 1 | 1.978 | 6.31 |
| 107986656 | LOC107986656 | uncharacterized LOC107986656 | 2.378 | 2.593 |
| 2519 | FUCA2 | alpha-L-fucosidase 2 | -0.491 | 1.319 |
| 7402 | UTRN | utrophin | -1.691 | 9.645 |
| 257218 | SHPRH | SNF2 histone linker PHD RING helicase | -0.582 | 1.712 |
| 10981 | RAB32 | RAB32, member RAS oncogene family | 0.826 | 4.413 |
| 105378041 | LOC105378041 | | 3.768 | 2.856 |
| 729178 | STXBP5-AS1 | STXBP5 antisense RNA 1 | 2.335 | 14.246 |
| 134957 | STXBP5 | syntaxin binding protein 5 | 2.313 | 10.778 |
| 23328 | SASH1 | SAM and SH3 domain containing 1 | -3.216 | 3.545 |
| 10090 | UST | uroly 2-sulfotransferase | -2.655 | 3.295 |
| 340152 | ZC3H12D | zinc finger CCHC-type containing 12D | -2.672 | 26.826 |
| 11104 | KATNA1 | katanin catalytic subunit A1 | 0.452 | 2.114 |
| 5110 | PCMT1 | protein-L-isoaspartate (D-aspartate) O-methyltransferase | 1.019 | 6.215 |
| 80129 | CCDC170 | coiled-coil domain containing 170 | -2.026 | 8.537 |
| 2099 | ESR1 | estrogen receptor 1 | 1.245 | 3.676 |
| 23345 | SYNE1 | spectrin repeat containing nuclear envelope protein 1 | 2.535 | 8.455 |
| 100505475 | SYNE1-AS1 | SYNE1 antisense RNA 1 | 2.534 | 3.176 |
| 26271 | FBXO5 | F-box protein 5 | 2.888 | 3.472 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 4988 | OPRM1 | opioid receptor mu 1 | 1.135 | 1.976 |
| 26034 | IPCEF1 | interaction protein for cytohesin exchange factors 1 | 1.033 | 2.114 |
| 57492 | ARID1B | AT-rich interaction domain 1B | -0.432 | 1.805 |
| 79683 | ZDHHC14 | zinc finger DHHC-type palmitoyltransferase 14 | -2.395 | 6.159 |
| 51429 | SNX9 | sorting nexin 9 | -1.361 | 8.131 |
| 8871 | SYNJ2 | synaptotjanin 2 | 1.865 | 2.66 |
| 56995 | TULP4 | TUB like protein 4 | -2.669 | 14.822 |
| 57583 | TMEM181 | transmembrane protein 181 | -0.53 | 1.872 |
| 6993 | DYNLT1 | dynein light chain Tctex-type 1 | -1.147 | 5.286 |
| 94120 | SYTL3 | synaptotagmin like 3 | -1.105 | 3.176 |
| 7430 | EZR | ezrin | -0.657 | 1.743 |
| 101409257 | EZR-AS1 | EZR antisense RNA 1 | -0.834 | 1.504 |
| 112267968 | LOC112267968 | uncharacterized LOC112267968 | -3.862 | 7.1 |
| 9589 | WTAP | WT1 associated protein | 0.992 | 2.822 |
| 39 | ACAT2 | acetyl-CoA acetyltransferase 2 | 0.893 | 3.283 |
| 6950 | TCF1 | t-complex 1 | 0.483 | 1.357 |
| 3482 | IGF2R | insulin like growth factor 2 receptor | 0.93 | 2.207 |
| 729603 | CHP1P2 | CHP1 pseudogene 2 | 0.968 | 3.196 |
| 6580 | SLC22A1 | solute carrier family 22 member 1 | 1.889 | 1.593 |
| 56895 | AGPAT4 | 1-acylglycerol-3-phosphate O-acyltransferase 4 | -1.239 | 2.057 |
| 79992 | AGPAT4-IT1 | AGPAT4 intronic transcript 1 | -1.541 | 2.057 |
| 9444 | QKI | QKI, KH domain containing RNA binding | -1.148 | 5.208 |
| 51660 | MPC1 | mitochondrial pyruvate carrier 1 | -0.482 | 1.475 |
| 6196 | RPS6KA2 | ribosomal protein S6 kinase A2 | 2.299 | 3.565 |
| 100874353 | RPS6KA2-IT1 | RPS6KA2 intronic transcript 1 | 2.972 | 1.452 |
| 8635 | RNASET2 | ribonuclease T2 | -0.717 | 1.512 |
| 105378120 | LOC105378120 | uncharacterized LOC105378120 | 1.19 | 1.898 |
| 11116 | CEP43 | centrosomal protein 43 | 0.916 | 3.403 |
| 401289 | LINC01624 | long intergenic non-protein coding RNA 1624 | -4.158 | 5.707 |
| 28514 | DLL1 | delta like canonical Notch ligand 1 | -2.986 | 3.109 |
| 5689 | PSMB1 | proteasome 20S subunit beta 1 | -0.381 | 1.725 |
| 102723872 | LOC102723872 | uncharacterized LOC102723872 | 1.323 | 3.39 |
| 105375112 | LOC105375112 | putative protein FAM157B | 1.489 | 5.267 |
| 107986751 | LOC107986751 | | 2.201 | 3.752 |
| 105375114 | LOC105375114 | uncharacterized LOC105375114 | 1.632 | 2.175 |
| 56975 | FAM20C | FAM20C golgi associated secretory pathway kinase | -1.628 | 2.694 |
| 441307 | PDGFA-DT | PDGFA divergent transcript | -1.755 | 1.818 |
| 5575 | PRKAR1B | protein kinase cAMP-dependent type I regulatory subunit beta | -0.925 | 1.365 |
| 101926963 | PRKAR1B-AS1 | PRKAR1B antisense RNA 1 | -1.794 | 1.724 |
| 54919 | DNAAF5 | dynein axonemal assembly factor 5 | -0.96 | 2.725 |
| 23353 | SUN1 | Sad1 and UNC84 domain containing 1 | -2.109 | 7.1 |
| 11033 | ADAP1 | ArfGAP with dual PH domains 1 | -0.55 | 1.477 |
| 84310 | C7orf50 | chromosome 7 open reading frame 50 | -1.46 | 1.904 |
| 90637 | ZFAND2A | zinc finger AN1-type containing 2A | 0.795 | 1.708 |
| 79778 | MICALL2 | MICAL like 2 | 1.793 | 4.933 |
| 26173 | INTS1 | integrator complex subunit 1 | 0.366 | 1.474 |
| 8379 | MAD1L1 | mitotic arrest deficient 1 like 1 | -1.514 | 6.897 |
| 100127955 | LOC100127955 | uncharacterized LOC100127955 | -1.999 | 3.006 |
| 29960 | MRM2 | mitochondrial rRNA methyltransferase 2 | -1.327 | 11.53 |
| 29886 | SNX8 | sorting nexin 8 | -1.393 | 5.059 |
| 3955 | LFNG | LFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase | -2.693 | 12.588 |
| 100616116 | MIR4648 | microRNA 4648 | -2.777 | 4.5 |
| 221927 | BRAT1 | BRCA1 associated ATM activator 1 | -1.22 | 3.596 |
| 23288 | IQCE | IQ motif containing E | -0.998 | 4.699 |
| 80727 | TTYH3 | weety family member 3 | -2.662 | 26.18 |
| 155185 | AMZ1 | archaelysin family metallopeptidase 1 | -2.381 | 3.088 |
| 2768 | GNA12 | G protein subunit alpha 12 | -1.715 | 7.769 |
| 84433 | CARD11 | caspase recruitment domain family member 11 | -3.501 | 3.382 |
| 221935 | SDK1 | sidekick cell adhesion molecule 1 | 2.663 | 1.582 |
| 221937 | FOXK1 | forkhead box K1 | -0.7 | 4.52 |
| 55698 | RADIL | Rap associating with DIL domain | 1.795 | 1.355 |
| 100533952 | RBAK-RBAKD1 | RBAK-RBAKD1 readthrough | -1.224 | 1.507 |
| 57786 | RBAK | RB associated KRAB zinc finger | -1.064 | 4.347 |
| 26100 | WIPI2 | WD repeat domain, phosphoinositide interacting 2 | -0.702 | 1.715 |
| 60 | ACTB | actin beta | 0.626 | 3.036 |
| 7965 | AIMP2 | aminoacyl tRNA synthetase complex interacting multifunctional protein 2 | -1.06 | 5.33 |
| 100310846 | ANKRD61 | ankyrin repeat domain 61 | 0.738 | 1.323 |
| 9265 | CYTH3 | cytohesin 3 | -1.483 | 3.711 |
| 221955 | DAGLB | diacylglycerol lipase beta | 0.558 | 1.351 |
| 101927391 | MIOS-DT | MIOS divergent transcript | 2.138 | 3.84 |
| 6119 | RPA3 | replication protein A3 | 0.973 | 1.626 |
| 113263 | GLCCI1 | glucocorticoid induced 1 | 2.591 | 6.719 |
| 3382 | ICA1 | islet cell autoantigen 1 | 2.774 | 5.694 |
| 221806 | VWDE | von Willebrand factor D and EGF domains | 2.786 | 3.714 |
| 57037 | ANKMY2 | ankyrin repeat and MYND domain containing 2 | 1.152 | 3.18 |
| 105375169 | LOC105375169 | uncharacterized LOC105375169 | 1.389 | 2.278 |
| 9734 | HDAC9 | histone deacetylase 9 | -2.138 | 3.306 |
| 107986698 | LOC107986698 | | -1.79 | 2.144 |
| 221830 | POLR1F | RNA polymerase I subunit F | -0.875 | 1.385 |
| 346389 | MACC1 | MET transcriptional regulator MACC1 | 1.705 | 1.36 |
| 6671 | SP4 | Sp4 transcription factor | 0.775 | 1.714 |
| 8701 | DNAH11 | dynein axonemal heavy chain 11 | 2.583 | 3.514 |
| 55536 | CDCA7L | cell division cycle associated 7 like | 2.589 | 3.716 |
| 84668 | HYCC1 | hyccin PI4KA lipid kinase complex subunit 1 | -0.975 | 7.728 |
| 10643 | IGFBP3 | insulin like growth factor 2 mRNA binding protein 3 | -1.876 | 1.676 |
| 29896 | TRA2A | transformer 2 alpha homolog | 0.895 | 2.666 |
| 90693 | CCDC126 | coiled-coil domain containing 126 | 2 | 9.571 |
| 51678 | PALS2 | protein associated with LIN7 2, MAGUK p55 family member | -1.981 | 2.478 |
| 26031 | OSBPL3 | oxysterol binding protein like 3 | -2.042 | 5.634 |
| 136895 | C7orf31 | chromosome 7 open reading frame 31 | -0.968 | 1.836 |
| 9603 | NFE2L3 | NFE2 like bZIP transcription factor 3 | -2.37 | 8.298 |
| 11335 | CBX3 | chromobox 3 | 0.635 | 2.083 |
| 11112 | HIBADH | 3-hydroxyisobutyrate dehydrogenase | -1.218 | 8.928 |
| 54504 | CPVL | carboxypeptidase vitellogenin like | -2.2 | 3.82 |
| 1124 | CHN2 | chimerin 2 | -3.118 | 19.492 |
| 107986700 | PRR15-DT | PRR15 divergent transcript | -2.821 | 5.192 |
| 646762 | LOC646762 | uncharacterized LOC646762 | 0.98 | 1.99 |
| 9805 | SCRN1 | secernin 1 | -1.85 | 9.892 |
| 84725 | PLEKHA8 | pleckstrin homology domain containing A8 | -1.022 | 3.509 |
| 10392 | NOD1 | nucleotide binding oligomerization domain containing 1 | -0.6 | 1.417 |
| 23080 | AVL9 | AVL9 cell migration associated | 0.69 | 2.247 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|---------------|---|----------|----------|
| 100129460 | DPY19L1P1 | DPY19L1 pseudogene 1 | 2.351 | 2.279 |
| 441208 | ZNRF2P1 | zinc and ring finger 2 pseudogene 1 | 2.419 | 3.831 |
| 401321 | LINC00997 | long intergenic non-protein coding RNA 997 | 2.455 | 3.956 |
| 25948 | KBTBD2 | kelch repeat and BTB domain containing 2 | 0.593 | 1.336 |
| 11328 | FKBP9 | FKBP prolyl isomerase 9 | 1.905 | 12.145 |
| 23333 | DPY19L1 | dpy-19 like C-mannosyltransferase 1 | -0.762 | 1.405 |
| 101928421 | LOC101928421 | uncharacterized LOC101928421 | 0.823 | 1.616 |
| 64224 | HERPUD2 | HERPUD family member 2 | 0.666 | 3.935 |
| 101930085 | HERPUD2-AS1 | HERPUD2 antisense RNA 1 | -0.94 | 1.993 |
| 23366 | MATCAP2 | microtubule associated tyrosine carboxypeptidase 2 | 3.302 | 5.834 |
| 54443 | ANLN | anillin, actin binding protein | 3.12 | 1.893 |
| 313 | AOAH | acyloxyacyl hydrolase | -1.666 | 5.063 |
| 9844 | ELMO1 | engulfment and cell motility 1 | 0.498 | 3.162 |
| 353345 | GPR141 | G protein-coupled receptor 141 | 2.177 | 6.464 |
| 51314 | NME8 | NME/NM23 family member 8 | 1.769 | 7.767 |
| 54749 | EPDR1 | ependymin related 1 | 1.824 | 1.489 |
| 445347 | TARP | TCR gamma alternate reading frame protein | 2.789 | 1.582 |
| 6967 | TRGC2 | T cell receptor gamma constant 2 | 2.792 | 2.564 |
| 6972 | TRGP2 | T cell receptor gamma joining P2 | 3.358 | 2.061 |
| 6966 | TRGC1 | T cell receptor gamma constant 1 | 2.665 | 2.012 |
| 6971 | TRGP1 | T cell receptor gamma joining P1 | 2.587 | 1.318 |
| 6982 | TRGV8 | T cell receptor gamma variable 8 | -2.633 | 2.215 |
| 100506776 | TRG-AS1 | T cell receptor gamma locus antisense RNA 1 | -1.929 | 3.27 |
| 273 | AMPH | amphiphysin | 4.201 | 3.467 |
| 349114 | LINC00265 | long intergenic non-protein coding RNA 265 | -1.093 | 2.422 |
| 8621 | CDK13 | cyclin dependent kinase 13 | 0.319 | 1.316 |
| 105375247 | LOC105375247 | uncharacterized LOC105375247 | 2.539 | 1.698 |
| 107986789 | LOC107986789 | uncharacterized LOC107986789 | 2.624 | 1.917 |
| 3624 | INHBA | inhibitin subunit beta A | 2.968 | 1.311 |
| 285954 | INHBA-AS1 | INHBA antisense RNA 1 | 2.276 | 1.758 |
| 79020 | C7orf25 | chromosome 7 open reading frame 25 | 1.777 | 3.703 |
| 5683 | PSMA2 | proteasome 20S subunit alpha 2 | 0.359 | 1.313 |
| 9263 | STK17A | serine/threonine kinase 17a | 1.781 | 8.38 |
| 644 | BLVRA | biliverdin reductase A | -2.205 | 10.562 |
| 51619 | UBE2D4 | ubiquitin conjugating enzyme E2 D4 (putative) | -1.126 | 5.635 |
| 401331 | RASA4CP | RAS p21 protein activator 4C, pseudogene | -0.761 | 1.672 |
| 28988 | DBNL | drebrin like | 0.501 | 3.522 |
| 5224 | PGAM2 | phosphoglycerate mutase 2 | 1.105 | 5.885 |
| 165 | AEBP1 | AE binding protein 1 | -5.005 | 4.266 |
| 5425 | POLD2 | DNA polymerase delta 2, accessory subunit | -1.009 | 2.003 |
| 10652 | YKT6 | YKT6 v-SNARE homolog | 0.434 | 1.612 |
| 23386 | NUCDC3 | NudC domain containing 3 | -0.538 | 1.868 |
| 94239 | H2AZ2 | H2A.Z variant histone 2 | 1.451 | 6.245 |
| 64005 | MYO1G | myosin IG | -0.772 | 3.643 |
| 285958 | SNHG15 | small nucleolar RNA host gene 15 | -1.162 | 2.858 |
| 677798 | SNORA9 | small nucleolar RNA, H/ACA box 9 | -1.454 | 2.761 |
| 9238 | TBRG4 | transforming growth factor beta regulator 4 | -0.802 | 4.12 |
| 101929008 | GTF2IP13 | general transcription factor Ili pseudogene 13 | 0.97 | 2.301 |
| 64759 | TNS3 | tensin 3 | -2.426 | 5.044 |
| 154664 | ABCA13 | ATP binding cassette subfamily A member 13 | 3.179 | 1.491 |
| 63979 | FIGNL1 | fidgetin like 1 | 1.041 | 1.316 |
| 2887 | GRB10 | growth factor receptor bound protein 10 | 2.638 | 12.582 |
| 55915 | LANCL2 | LanC like glutathione S-transferase 2 | -0.787 | 3.215 |
| 360132 | FKBP9P1 | FKBP prolyl isomerase 9 pseudogene 1 | 2.236 | 5.02 |
| 51373 | MRPS17 | mitochondrial ribosomal protein S17 | -0.676 | 1.481 |
| 2631 | NIPSNAP2 | nipsnap homolog 2 | -0.852 | 5.858 |
| 908 | CCT6A | chaperonin containing TCP1 subunit 6A | -0.754 | 3.016 |
| 51427 | ZNF107 | zinc finger protein 107 | 1.619 | 1.982 |
| 10793 | ZNF273 | zinc finger protein 273 | 1.932 | 3.939 |
| 441239 | LOC441239 | uncharacterized LOC441239 | 2.237 | 1.885 |
| 109504726 | ERV3-1-ZNF117 | ERV3-1-ZNF117 readthrough | 0.806 | 1.663 |
| 51351 | ZNF117 | zinc finger protein 117 | 0.853 | 1.641 |
| 435 | ASL | argininosuccinate lyase | 0.926 | 5.301 |
| 27297 | CRCP | CGRP receptor component | 0.814 | 2.576 |
| 8460 | TPST1 | tyrosylprotein sulfotransferase 1 | 4.128 | 12.22 |
| 285908 | LINC00174 | long intergenic non-protein coding RNA 174 | 1.299 | 2.652 |
| 100289098 | LINC03011 | long intergenic non-protein coding RNA 3011 | 1.971 | 1.613 |
| 27342 | RABGEF1 | RAB guanine nucleotide exchange factor 1 | 1.461 | 5.183 |
| 729156 | GTF2IRD1P1 | GTF2I repeat domain containing 1 pseudogene 1 | 1.193 | 2.568 |
| 26053 | AUTS2 | activator of transcription and developmental regulator AUTS2 | -3.06 | 3.418 |
| 260294 | NSUN5P2 | NSUN5 pseudogene 2 | 0.874 | 3.507 |
| 378108 | TRIM74 | tripartite motif containing 74 | 1.27 | 7.331 |
| 100101148 | LOC100101148 | FKBP prolyl isomerase 6 pseudogene | 1.145 | 2.249 |
| 442578 | STAG3L3 | stromal antigen 3-like 3 (pseudogene) | 1.23 | 6.432 |
| 100101440 | PMS2P7 | PMS1 homolog 2, mismatch repair system component pseudogene 7 | 0.997 | 2.326 |
| 643862 | SPDYE10 | speedy/RINGO cell cycle regulator family member E10 | 0.766 | 1.616 |
| 100093631 | GTF2IP4 | general transcription factor Ili pseudogene 4 | 0.85 | 3.304 |
| 654816 | NCF1B | neutrophil cytosolic factor 1B pseudogene | 0.971 | 2.185 |
| 55695 | NSUN5 | NOP2/Sun RNA methyltransferase 5 | 1.912 | 4.642 |
| 8326 | FZD9 | frizzled class receptor 9 | 3.992 | 4.048 |
| 26608 | TBL2 | transducin beta like 2 | -0.891 | 2.893 |
| 6804 | STX1A | syntaxin 1A | 2.662 | 4.654 |
| 105375350 | LOC105375350 | uncharacterized LOC105375350 | 2.033 | 1.577 |
| 171022 | ABHD11-AS1 | ABHD11 antisense RNA 1 (tail to tail) | 1.52 | 1.485 |
| 3984 | LIMK1 | LIM domain kinase 1 | -1.318 | 1.523 |
| 7461 | CLIP2 | CAP-Gly domain containing linker protein 2 | -2.139 | 8.311 |
| 2969 | GTF2I | general transcription factor Ili | 0.579 | 2.112 |
| 653361 | NCF1 | neutrophil cytosolic factor 1 | 0.727 | 1.421 |
| 84163 | GTF2IRD2 | GTF2I repeat domain containing 2 | 0.985 | 3.87 |
| 442582 | STAG3L2 | stromal antigen 3-like 2 (pseudogene) | 1.105 | 5.765 |
| 729438 | CASTOR2 | cytosolic arginine sensor for mTORC1 subunit 2 | 0.829 | 1.463 |
| 107986811 | LOC107986811 | GTF2I repeat domain containing 2B | 2.482 | 4.671 |
| 389524 | GTF2IRD2B | neutrophil cytosolic factor 1C pseudogene | 1.087 | 4.775 |
| 654817 | NCF1C | general transcription factor Ili pseudogene 1 | 0.879 | 1.953 |
| 2970 | GTF2IP1 | uncharacterized LOC107986710 | 0.785 | 2.913 |
| 107986710 | LOC107986710 | stromal antigen 3-like 1 (pseudogene) | 0.997 | 2.316 |
| 54441 | STAG3L1 | FKBP prolyl isomerase 6 pseudogene | 1.216 | 5.932 |
| 541473 | LOC541473 | NSUN5 pseudogene 1 | 0.811 | 1.771 |
| 155400 | NSUN5P1 | PMS1 homolog 2, mismatch repair system component pseudogene 3 | 0.505 | 1.443 |
| 5387 | PMS2P3 | huntingtin interacting protein 1 | 0.535 | 1.652 |
| 3092 | HIP1 | | 0.906 | 3.349 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|------------------------|--|----------|----------|
| 5447 | POR | cytochrome p450 oxidoreductase | -0.912 | 4.482 |
| 4191 | MDH2 | malate dehydrogenase 2 | -0.459 | 2.654 |
| 3315 | HSPB1 | heat shock protein family B (small) member 1 | -1.8 | 2.729 |
| 7532 | YWHAG | tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein gamma | -0.576 | 2.125 |
| 10875 | FGL2 | fibrinogen like 2 | -2.725 | 7.904 |
| 54103 | GSAP | gamma-secretase activating protein | -0.663 | 2.751 |
| 101927243 | LOC101927243 | uncharacterized LOC101927243 | -2.049 | 1.914 |
| 100505854 | APTR | Alu-mediated CDKN1A/p21 transcriptional regulator | 1.172 | 4.87 |
| 57157 | PHTF2 | putative homeodomain transcription factor 2 | -0.63 | 2.179 |
| 948 | CD36 | CD36 molecule | -1.942 | 9.938 |
| 10512 | SEMA3C | semaphorin 3C | -1.169 | 2.487 |
| 222223 | ELAPOR2 | endosome-lysosome associated apoptosis and autophagy regulator family member 2 | -2.1 | 1.608 |
| 105375384 | LOC105375384 | uncharacterized LOC105375384 | -1.445 | 1.497 |
| 11257 | TP53TG1 | TP53 target 1 | 0.874 | 1.375 |
| 5244 | ABCB4 | ATP binding cassette subfamily B member 4 | -2.142 | 2.085 |
| 55972 | SLC25A40 | solute carrier family 25 member 40 | 1.075 | 4.029 |
| 10926 | DBF4 | DBF4 zinc finger | 1.466 | 2.977 |
| 53616 | ADAM22 | ADAM metallopeptidase domain 22 | 1.821 | 2.998 |
| 9069 | CLDN12 | claudin 12 | 2.446 | 2.935 |
| 5218 | CDK14 | cyclin dependent kinase 14 | 1.682 | 5.961 |
| 8321 | FZD1 | frizzled class receptor 1 | -1.268 | 4.465 |
| 105375392 | LINC02932 | long intergenic non-protein coding RNA 2932 | 6.21 | 3.678 |
| 10142 | AKAP9 | A-kinase anchoring protein 9 | -0.484 | 3.439 |
| 1595 | CYP51A1 | cytochrome P450 family 51 subfamily A member 1 | 1.078 | 2.122 |
| 54467 | ANKK1B1 | ankyrin repeat and IBR domain containing 1 | -0.604 | 3.466 |
| 57798 | GATAD1 | GATA zinc finger domain containing 1 | -0.59 | 1.828 |
| 1021 | CDK6 | cyclin dependent kinase 6 | 0.781 | 2.059 |
| 54809 | SAMD9 | sterile alpha motif domain containing 9 | -1.25 | 1.561 |
| 55610 | VPS50 | VPS50 subunit of EARP/GARP II complex | -0.963 | 3.733 |
| 10282 | BET1 | Bet1 golgi vesicular membrane trafficking protein | -0.737 | 1.755 |
| 57001 | SDHAF3 | succinate dehydrogenase complex assembly factor 3 | 1.254 | 3.045 |
| 440 | ASNS | asparagine synthetase (glutamine-hydrolyzing) | 1.12 | 2.116 |
| 107986827 | CZ1P-ASNS | CZ1P-ASNS readthrough | 0.84 | 1.837 |
| 25851 | TECPR1 | tectonin beta-propeller repeat containing 1 | -0.735 | 2.973 |
| 25798 | BRI3 | brain protein I3 | 0.473 | 1.805 |
| 8896 | BUD31 | BUD31 homolog | 0.392 | 1.38 |
| 285989 | ZNF789 | zinc finger protein 789 | 0.786 | 2.052 |
| 84124 | ZNF394 | zinc finger protein 394 | 0.946 | 4.004 |
| 89122 | TRIM4 | tripartite motif containing 4 | -0.541 | 2.36 |
| 4176 | MCM7 | minichromosome maintenance complex component 7 | 1.602 | 3.367 |
| 407014 | MIR25 | microRNA 25 | 1.966 | 2.729 |
| 55262 | TRAPP C14 | trafficking protein particle complex subunit 14 | 0.584 | 1.713 |
| 10734 | STAG3 | stromal antigen 3 | 1.928 | 6.065 |
| 352954 | CASTOR3P | CASTOR family member 3, pseudogene | 2.091 | 8.885 |
| 79037 | PVRIG | PVR related immunoglobulin domain containing | 1.713 | 5.491 |
| 107986828 | LOC107986828 | uncharacterized LOC107986828 | 1.55 | 4.702 |
| 105375426 | LOC105375426 | uncharacterized LOC105375426 | 2.998 | 2.761 |
| 5379 | PMS2P1 | PMS1 homolog 2, mismatch repair system component pseudogene 1 | 0.686 | 1.521 |
| 101752399 | STAG3L5P-PVRIG2P-PILRB | STAG3L5P-PVRIG2P-PILRB readthrough | 0.886 | 1.77 |
| 102466747 | MIR6840 | microRNA 6840 | 1.7 | 3.55 |
| 29990 | PILRB | paired immunoglobulin like type 2 receptor beta | 0.998 | 1.776 |
| 29992 | PILRA | paired immunoglobulin like type 2 receptor alpha | -1.825 | 3.849 |
| 55063 | ZCWPW1 | zinc finger CW-type and PWWP domain containing 1 | -1.023 | 3.025 |
| 221908 | PPP1R35 | protein phosphatase 1 regulatory subunit 35 | 0.825 | 3.308 |
| 101927632 | PPP1R35-AS1 | PPP1R35 antisense RNA 1 | 0.783 | 2.564 |
| 402573 | SPACDR | sperm acrosome developmental regulator | 1.157 | 1.426 |
| 64598 | MOSPD3 | motile sperm domain containing 3 | 1.413 | 9.989 |
| 2783 | GNB2 | G protein subunit beta 2 | 0.466 | 2.119 |
| 51593 | SRRT | serrate, RNA effector molecule | 0.459 | 1.717 |
| 8985 | PLOD3 | procollagen-lysine,2-oxoglutarate 5-dioxygenase 3 | -0.864 | 4.229 |
| 24146 | CLDN15 | claudin 15 | 0.832 | 3.538 |
| 51024 | FIS1 | fission, mitochondrial 1 | -0.528 | 1.308 |
| 1523 | CUX1 | cut like homeobox 1 | -0.693 | 2.936 |
| 10603 | SH2B2 | SH2B adaptor protein 2 | -1.946 | 4.703 |
| 80228 | ORAI2 | ORAI calcium release-activated calcium modulator 2 | 1.45 | 7.543 |
| 54784 | ALKBH4 | alkB homolog 4, lysine demethylase | 1.028 | 6.274 |
| 222229 | LRWD1 | leucine rich repeats and WD repeat domain containing 1 | 1.798 | 13.85 |
| 100847073 | MIR5090 | microRNA 5090 | 1.774 | 1.695 |
| 5439 | POLR2J | RNA polymerase II subunit J | 0.621 | 3.143 |
| 100271927 | RASA4B | RAS p21 protein activator 4B | -3.496 | 35.261 |
| 10156 | RASA4 | RAS p21 protein activator 4 | -3.435 | 30.546 |
| 100133005 | RASA4DP | RAS p21 protein activator 4D, pseudogene | -3.051 | 17.242 |
| 222235 | FBXL13 | F-box and leucine rich repeat protein 13 | 1.654 | 1.61 |
| 58160 | NFE4 | nuclear factor, erythroid 4 | 4.184 | 4.296 |
| 83787 | ARMC10 | armadillo repeat containing 10 | -1.022 | 3.977 |
| 349152 | DPY19L2P2 | DPY19L2 pseudogene 2 | 1.907 | 2.564 |
| 60561 | RINT1 | RAD50 interactor 1 | 0.773 | 1.377 |
| 5294 | PIK3CG | phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma | 1.038 | 2.765 |
| 115253422 | DUS4L-BCAP29 | DUS4L-BCAP29 readthrough | 0.886 | 1.95 |
| 55973 | BCAP29 | B cell receptor associated protein 29 | 0.97 | 1.891 |
| 101927974 | CBL1-AS1 | CBL1 antisense RNA 1 | 1.324 | 2 |
| 1738 | DLD | dihydrolipoamide dehydrogenase | 0.782 | 1.939 |
| 3912 | LAMB1 | laminin subunit beta 1 | 2.658 | 8.115 |
| 50640 | PNPLA8 | patatin like phospholipase domain containing 8 | 0.872 | 1.699 |
| 4189 | DNAJB9 | DnaJ heat shock protein family (Hsp40) member B9 | 0.738 | 1.6 |
| 83943 | IMMP2L | inner mitochondrial membrane peptidase subunit 2 | -2.445 | 4.804 |
| 11179 | ZNF277 | zinc finger protein 277 | -0.706 | 2.31 |
| 3475 | IFRD1 | interferon related developmental regulator 1 | 1.305 | 3.177 |
| 286006 | LSMEM1 | leucine rich single-pass membrane protein 1 | 1.489 | 2.046 |
| 401397 | SMIM30 | small integral membrane protein 30 | -1.72 | 5.376 |
| 29969 | MDFIC | MyoD family inhibitor domain containing | -2.115 | 15.253 |
| 22797 | TFEC | transcription factor EC | -1.2 | 9.554 |
| 79974 | CPED1 | cadherin like and PC-esterase domain containing 1 | -3.961 | 30.035 |
| 10447 | FAM3C | FAM3 metabolism regulating signaling molecule C | -1.853 | 4.536 |
| 4698 | NDUFA5 | NADH:ubiquinone oxidoreductase subunit A5 | -0.95 | 6.399 |
| 8976 | WASL | WASP like actin nucleation promoting factor | -0.741 | 1.784 |
| 27044 | SND1 | staphylococcal nuclease and tudor domain containing 1 | -0.581 | 1.796 |
| 64101 | LRRC4 | leucine rich repeat containing 4 | 2.167 | 4.544 |
| 401399 | PRRT4 | proline rich transmembrane protein 4 | 3.071 | 1.355 |
| 64753 | CCDC136 | coiled-coil domain containing 136 | -3.477 | 9.852 |
| 9296 | ATP6V1F | ATPase H ⁺ transporting V1 subunit F | -0.694 | 1.671 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|---------------|--|----------|----------|
| 3663 | IRF5 | interferon regulatory factor 5 | -1.533 | 19.988 |
| 23534 | TNPO3 | transportin 3 | 0.995 | 3.349 |
| 286016 | TP1P2 | triosephosphate isomerase 1 pseudogene 2 | 1.459 | 1.792 |
| 340348 | TSPAN33 | tetraspanin 33 | -1.799 | 2.368 |
| 23382 | AHCYL2 | adenosylhomocysteinase like 2 | -1.157 | 5.046 |
| 4899 | NRF1 | nuclear respiratory factor 1 | 0.477 | 1.856 |
| 7328 | UBE2H | ubiquitin conjugating enzyme E2 H | 0.813 | 2.307 |
| 378805 | LINC-PIINT | long intergenic non-protein coding RNA, p53 induced transcript | 0.838 | 2.213 |
| 231 | AKR1B1 | aldo-keto reductase family 1 member B | -2.928 | 3.689 |
| 669 | BPGM | bisphosphoglycerate mutase | 0.643 | 1.86 |
| 647087 | STMP1 | short transmembrane mitochondrial protein 1 | 0.535 | 1.888 |
| 105375523 | LOC105375523 | uncharacterized LOC105375523 | -3.441 | 3.093 |
| 51631 | LUC7L2 | LUC7 like 2, pre-mRNA splicing factor | 0.436 | 1.655 |
| 154791 | FMC1 | formation of mitochondrial complex V assembly factor 1 homolog | 0.918 | 2.805 |
| 100996928 | FMC1-LUC7L2 | FMC1-LUC7L2 readthrough | 0.484 | 1.895 |
| 28996 | HIPK2 | homeodomain interacting protein kinase 2 | 0.584 | 2.172 |
| 6916 | TBXAS1 | thromboxane A synthase 1 | -0.816 | 2.381 |
| 105375532 | LOC105375532 | uncharacterized LOC105375532 | -1.345 | 4.342 |
| 64761 | PARP12 | poly(ADP-ribose) polymerase family member 12 | -1.236 | 1.934 |
| 100134229 | KDM7A-DT | KDM7A divergent transcript | 0.772 | 1.453 |
| 84255 | SLC37A3 | solute carrier family 37 member 3 | 2.124 | 13.548 |
| 401409 | RAB19 | RAB19, member RAS oncogene family | 4.716 | 9.461 |
| 673 | BRAF | B-Raf proto-oncogene, serine/threonine kinase | 1.044 | 5.067 |
| 105375536 | LOC105375536 | uncharacterized LOC105375536 | 2.034 | 1.621 |
| 55750 | AGK | acylglycerol kinase | -1.412 | 5.36 |
| 57189 | DENND11 | DENN domain containing 11 | -2.501 | 6.931 |
| 23601 | CLEC5A | C-type lectin domain containing 5A | 2.272 | 2.905 |
| 8972 | MGAM | maltase-glucoamylase | 4.229 | 12.881 |
| 93432 | MGAM2 | maltase-glucoamylase 2 (putative) | 4.648 | 2.652 |
| 28568 | TRBV19 | T cell receptor beta variable 19 | -4.179 | 2.304 |
| 28639 | TRBC1 | T cell receptor beta constant 1 | -3.537 | 2.746 |
| 28638 | TRBC2 | T cell receptor beta constant 2 | -3.933 | 3.653 |
| 373156 | GSTK1 | glutathione S-transferase kappa 1 | -0.826 | 3.542 |
| 835 | CASP2 | caspase 2 | 0.963 | 3.492 |
| 441294 | CTAGE15 | CTAGE family member 15 | 2.591 | 2.349 |
| 340307 | CTAGE6 | CTAGE family member 6 | 2.387 | 2.071 |
| 100128553 | CTAGE4 | CTAGE family member 4 | 2.834 | 2.903 |
| 445328 | ARHGEF35 | Rho guanine nucleotide exchange factor 35 | 2.406 | 2.641 |
| 101928605 | ARHGEF35-AS1 | ARHGEF35 antisense RNA 1 | 1.936 | 1.772 |
| 112267987 | LOC112267987 | | 2.195 | 1.698 |
| 402317 | OR2A42 | olfactory receptor family 2 subfamily A member 42 | 1.849 | 1.74 |
| 101928492 | OR2A1-AS1 | OR2A1 antisense RNA 1 | 2.323 | 2.702 |
| 401428 | OR2A20P | olfactory receptor family 2 subfamily A member 20 pseudogene | 1.967 | 2.456 |
| 728377 | ARHGEF34P | Rho guanine nucleotide exchange factor 34, pseudogene | 2.634 | 2.503 |
| 100142659 | CTAGE8 | CTAGE family member 8 | 2.634 | 2.258 |
| 441295 | OR2A9P | olfactory receptor family 2 subfamily A member 9 pseudogene | 2.027 | 2.458 |
| 346528 | OR2A1 | olfactory receptor family 2 subfamily A member 1 | 1.678 | 1.511 |
| 7984 | ARHGEF5 | Rho guanine nucleotide exchange factor 5 | 2.659 | 2.265 |
| 27010 | TPK1 | thiamin pyrophosphokinase 1 | -1.357 | 2.823 |
| 8454 | CUL1 | cullin 1 | -1.552 | 3.585 |
| 2146 | EZH2 | enhancer of zeste 2 polycomb repressive complex 2 subunit | 2.097 | 5.476 |
| 9601 | PDIA4 | protein disulfide isomerase family A member 4 | -1.01 | 5.471 |
| 155054 | ZNF425 | zinc finger protein 425 | 1.709 | 2.385 |
| 57541 | ZNF398 | zinc finger protein 398 | 1.692 | 6.483 |
| 8427 | ZNF282 | zinc finger protein 282 | 1.297 | 6.654 |
| 100289678 | ZNF783 | zinc finger protein 783 | -2.023 | 9.033 |
| 155060 | LOC155060 | AI894139 pseudogene | -1.853 | 5.222 |
| 27153 | ZNF777 | zinc finger protein 777 | -1.255 | 3.634 |
| 84626 | KRBA1 | KRAB-A domain containing 1 | -1.346 | 2.739 |
| 155066 | ATP6V0E2 | ATPase H+ transporting V0 subunit e2 | -2.523 | 6.338 |
| 653857 | ACTR3C | actin related protein 3C | 0.861 | 1.303 |
| 65999 | LRRC61 | leucine rich repeat containing 61 | 1.267 | 2.216 |
| 113763 | ZBED10P | zinc finger BED-type containing 10, pseudogene | 1.713 | 6.036 |
| 29803 | REPIN1 | replication initiator 1 | 0.589 | 1.567 |
| 728743 | LOC728743 | zinc finger domain-containing protein LOC728743 | -1.529 | 1.69 |
| 155038 | GIMAP8 | GTPase, IMAP family member 8 | -3.272 | 22.302 |
| 168537 | GIMAP7 | GTPase, IMAP family member 7 | -4.048 | 25.368 |
| 55303 | GIMAP4 | GTPase, IMAP family member 4 | -3.218 | 8.863 |
| 474344 | GIMAP6 | GTPase, IMAP family member 6 | -3.119 | 13.157 |
| 26157 | GIMAP2 | GTPase, IMAP family member 2 | -2.19 | 10.634 |
| 100527949 | GIMAP1-GIMAP5 | GIMAP1-GIMAP5 readthrough | -3.197 | 20.133 |
| 170575 | GIMAP1 | GTPase, IMAP family member 1 | -2.776 | 21.649 |
| 55340 | GIMAP5 | GTPase, IMAP family member 5 | -3.582 | 22.312 |
| 105375566 | LOC105375566 | uncharacterized LOC105375566 | -5.251 | 10.245 |
| 28959 | TMEM176B | transmembrane protein 176B | -4.718 | 3.363 |
| 55365 | TMEM176A | transmembrane protein 176A | -4.682 | 3.604 |
| 4846 | NOS3 | nitric oxide synthase 3 | -3.324 | 2.834 |
| 116988 | AGAP3 | ArfGAP with GTPase domain, ankyrin repeat and PH domain 3 | -1.968 | 8.914 |
| 107986862 | LOC107986862 | | -2.645 | 3.604 |
| 114483834 | ABCF2-H2BK1 | ABCF2-H2BK1 readthrough | -1.044 | 5.41 |
| 10061 | ABCF2 | ATP binding cassette subfamily F member 2 | -0.952 | 5.954 |
| 51667 | NUB1 | negative regulator of ubiquitin like proteins 1 | -0.712 | 3.539 |
| 349136 | WDR86 | WD repeat domain 86 | -0.87 | 2.418 |
| 51422 | PRKAG2 | protein kinase AMP-activated non-catalytic subunit gamma 2 | -2.218 | 13.665 |
| 644090 | PRKAG2-AS2 | PRKAG2 antisense RNA 2 | -3.202 | 6.295 |
| 100505483 | PRKAG2-AS1 | PRKAG2 antisense RNA 1 | -2.648 | 7.728 |
| 63917 | GALNT11 | polypeptide N-acetylgalactosaminyltransferase 11 | -0.947 | 5.87 |
| 7516 | XRCC2 | X-ray repair cross complementing 2 | 2.373 | 1.528 |
| 105375591 | INSIG1-DT | INSIG1 divergent transcript | -1 | 1.313 |
| 100506302 | RBM33-DT | RBM33 divergent transcript | 1.131 | 3.106 |
| 140545 | RNF32 | ring finger protein 32 | 1.033 | 3.719 |
| 101927858 | RNF32-AS1 | RNF32 antisense RNA 1 | 1.133 | 2.592 |
| 64327 | LMBR1 | limb development membrane protein 1 | 0.994 | 5.051 |
| 3110 | MNX1 | motor neuron and pancreas homeobox 1 | 4.074 | 3.342 |
| 105375606 | MNX1-AS2 | MNX1 antisense RNA 2 | 5.018 | 2.688 |
| 100506585 | PTPRN2-AS1 | PTPRN2 antisense RNA 1 | -1.054 | 1.86 |
| 54892 | NCAPG2 | non-SMC condensin II complex subunit G2 | 2.404 | 3.405 |
| 55112 | DYNC21 | dynein 2 intermediate chain 1 | -0.69 | 1.646 |
| 26260 | FBXO25 | F-box protein 25 | -1.198 | 3.208 |
| 157697 | ERICH1 | glutamate rich 1 | -0.722 | 2.418 |
| 2055 | CLN8 | CLN8 transmembrane ER and ERGIC protein | -0.874 | 2.351 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 9920 | KBTBD11 | kelch repeat and BTB domain containing 11 | 0.843 | 1.616 |
| 100287015 | MCPH1-DT | MCPH1 divergent transcript | 1.35 | 3.483 |
| 55326 | AGPAT5 | 1-acylglycerol-3-phosphate O-acyltransferase 5 | -1.402 | 6.087 |
| 389610 | XKR5 | XK related 5 | 3.088 | 2.382 |
| 100652791 | GS1-24F4.2 | uncharacterized LOC100652791 | 2.581 | 1.543 |
| 1669 | DEFA4 | defensin alpha 4 | 3.301 | 1.473 |
| 1667 | DEFA1 | defensin alpha 1 | 2.868 | 1.834 |
| 170949 | DEFT1P | defensin theta 1, pseudogene | 11.094 | 20.542 |
| 100287083 | DEFT1P2 | defensin theta 1, pseudogene 2 | 6.029 | 3.909 |
| 1670 | DEFA5 | defensin alpha 5 | 2.531 | 1.746 |
| 101928095 | LOC101928095 | uncharacterized LOC101928095 | 2.499 | 2.458 |
| 101929400 | LOC101929400 | uncharacterized LOC101929400 | 3.442 | 3.934 |
| 112268014 | LOC112268014 | uncharacterized LOC101929400 | -2.673 | 2.371 |
| 157285 | PRAG1 | PEAK1 related, kinase-activating pseudokinase 1 | -3.995 | 6.527 |
| 137075 | CLDN23 | claudin 23 | -3.614 | 5.573 |
| 9258 | MFHAS1 | multifunctional ROCO family signaling regulator 1 | -2.392 | 7.431 |
| 79660 | PPP1R3B | protein phosphatase 1 regulatory subunit 3B | 1.129 | 2.216 |
| 4482 | MSRA | methionine sulfoxide reductase A | 1.754 | 10.528 |
| 101929191 | LINC03022 | long intergenic non-protein coding RNA 3022 | 1.924 | 2.028 |
| 112268021 | LOC112268021 | | 2.163 | 4.506 |
| 94137 | RP1L1 | RP1 like 1 | 5.556 | 3.944 |
| 286046 | XKR6 | XK related 6 | -2.203 | 2.202 |
| 83648 | FAM167A | family with sequence similarity 167 member A | -6.52 | 6.538 |
| 640 | BLK | BLK proto-oncogene, Src family tyrosine kinase | -5.991 | 7.083 |
| 252969 | NEIL2 | nei like DNA glycosylase 2 | -2.074 | 3.902 |
| 2222 | FDFT1 | farnesyl-diphosphate farnesyltransferase 1 | 0.58 | 1.998 |
| 1508 | CTSB | cathepsin B | -1.374 | 3.686 |
| 91694 | LONRF1 | LON peptidase N-terminal domain and ring finger 1 | 0.609 | 1.492 |
| 4481 | MSR1 | macrophage scavenger receptor 1 | -2.849 | 1.548 |
| 107986918 | LOC107986918 | uncharacterized LOC107986918 | 0.981 | 1.636 |
| 29883 | CNOT7 | CCR4-NOT transcription complex subunit 7 | -0.488 | 1.879 |
| 427 | ASAH1 | N-acylsphingosine amidohydrolase 1 | -0.485 | 1.488 |
| 101929066 | ASAH1-AS1 | ASAH1 antisense RNA 1 | -1.669 | 1.369 |
| 23362 | PSD3 | pleckstrin and Sec7 domain containing 3 | -2.705 | 5.302 |
| 63898 | SH2D4A | SH2 domain containing 4A | 2.925 | 2.879 |
| 102724881 | LOC102724881 | chondroitin sulfate N-acetylgalactosaminyltransferase 1 | 3.216 | 4.285 |
| 55790 | CSGALNACT1 | | 3.194 | 5.726 |
| 105379308 | LOC105379308 | | 3.493 | 3.723 |
| 55174 | INTS10 | integrator complex subunit 10 | -0.609 | 1.91 |
| 6570 | SLC18A1 | solute carrier family 18 member A1 | -3.823 | 3.672 |
| 9046 | DOK2 | docking protein 2 | -2.263 | 9.212 |
| 23039 | XPO7 | exportin 7 | -0.46 | 2.042 |
| 64760 | FHIP2B | FHF complex subunit HOOK interacting protein 2B | -0.606 | 1.952 |
| 649 | BMP1 | bone morphogenetic protein 1 | -1.851 | 6.188 |
| 661 | POLR3D | RNA polymerase III subunit D | -1.13 | 4.341 |
| 23516 | SLC39A14 | solute carrier family 39 member 14 | -2.534 | 2.445 |
| 5533 | PPP3CC | protein phosphatase 3 catalytic subunit gamma | -1.149 | 4.275 |
| 10174 | SORBS3 | sorbin and SH3 domain containing 3 | -3.857 | 5.607 |
| 64236 | PDLIM2 | PDZ and LIM domain 2 | -0.637 | 1.388 |
| 541565 | C8orf58 | chromosome 8 open reading frame 58 | -0.969 | 1.447 |
| 55909 | BIN3 | bridging integrator 3 | 1.007 | 3.885 |
| 23221 | RHOBTB2 | Rho related BTB domain containing 2 | -1.02 | 6.794 |
| 8795 | TNFRSF10B | TNF receptor superfamily member 10b | -2.173 | 15.661 |
| 254896 | LOC254896 | uncharacterized LOC254896 | 2.355 | 4.747 |
| 8794 | TNFRSF10C | TNF receptor superfamily member 10c | 2.343 | 5.492 |
| 8797 | TNFRSF10A | TNF receptor superfamily member 10a | 0.502 | 1.426 |
| 91782 | CHMP7 | charged multivesicular body protein 7 | -1.183 | 2.972 |
| 203069 | R3HCC1 | R3H domain and coiled-coil containing 1 | 0.36 | 1.641 |
| 51312 | SLC25A37 | solute carrier family 25 member 37 | 1.419 | 2.34 |
| 10863 | ADAM28 | ADAM metallopeptidase domain 28 | -1.923 | 5.233 |
| 27299 | ADAMDEC1 | ADAM like decysin 1 | -2.882 | 2.533 |
| 2796 | GNRH1 | gonadotropin releasing hormone 1 | 0.913 | 1.392 |
| 54793 | KCTD9 | potassium channel tetramerization domain containing 9 | 1.105 | 3.126 |
| 157313 | CDCA2 | cell division cycle associated 2 | 3.515 | 1.819 |
| 5520 | PPP2R2A | protein phosphatase 2 regulatory subunit Balpha | 0.566 | 1.504 |
| 1808 | DYPSL2 | dihydropyrimidinase like 2 | -1.885 | 7.086 |
| 23087 | TRIM35 | tripartite motif containing 35 | 1.172 | 2.634 |
| 2185 | PTK2B | protein tyrosine kinase 2 beta | 0.716 | 2.98 |
| 2053 | EPHX2 | epoxide hydrolase 2 | -3.325 | 2.529 |
| 157570 | ESCO2 | establishment of sister chromatid cohesion N-acetyltransferase 2 | 3.033 | 1.969 |
| 55140 | ELP3 | elongator acetyltransferase complex subunit 3 | -0.768 | 1.698 |
| 5368 | PNOC | prepronociceptin | -2.987 | 3.595 |
| 55756 | INTS9 | integrator complex subunit 9 | -1.181 | 6.722 |
| 79618 | HMBOX1 | homeobox containing 1 | -0.331 | 1.383 |
| 1846 | DUSP4 | dual specificity phosphatase 4 | -2.968 | 3.585 |
| 51669 | SARAF | store-operated calcium entry associated regulatory factor | -0.882 | 3.889 |
| 23484 | LEPROTL1 | leptin receptor overlapping transcript like 1 | -1.07 | 5.512 |
| 619373 | MBOAT4 | membrane bound O-acyltransferase domain containing 4 | -2.258 | 2.473 |
| 10671 | DCTN6 | dynactin subunit 6 | -0.553 | 1.957 |
| 2936 | GSR | glutathione-disulfide reductase | 0.597 | 1.367 |
| 5516 | PPP2CB | protein phosphatase 2 catalytic subunit beta | -0.938 | 4.453 |
| 7486 | WRN | WRN RecQ like helicase | 0.682 | 2.398 |
| 3084 | NRG1 | neuregulin 1 | -1.879 | 1.94 |
| 105379362 | LOC105379362 | uncharacterized LOC105379362 | -1.368 | 1.948 |
| 80185 | TTI2 | TELO2 interacting protein 2 | 0.597 | 1.367 |
| 80139 | ZNF703 | zinc finger protein 703 | -3.914 | 25.646 |
| 102723701 | LOC102723701 | uncharacterized LOC102723701 | 1.03 | 2.128 |
| 25960 | ADGRA2 | adhesion G protein-coupled receptor A2 | -1.674 | 5.607 |
| 80223 | RAB11FIP1 | RAB11 family interacting protein 1 | 1.135 | 5.582 |
| 1978 | EIF4EBP1 | eukaryotic translation initiation factor 4E binding protein 1 | -0.922 | 3.419 |
| 9070 | ASH2L | ASH2 like, histone lysine methyltransferase complex subunit | 0.706 | 1.797 |
| 9530 | BAG4 | BAG cochaperone 4 | 1.171 | 3.231 |
| 54904 | NSD3 | nuclear receptor binding SET domain protein 3 | 0.65 | 3.165 |
| 137994 | LETM2 | leucine zipper and EF-hand containing transmembrane protein 2 | 0.954 | 2.87 |
| 2260 | FGFR1 | fibroblast growth factor receptor 1 | 2.492 | 8.345 |
| 203100 | HTRA4 | HtrA serine peptidase 4 | 2.693 | 2.297 |
| 8754 | ADAM9 | ADAM metallopeptidase domain 9 | 0.678 | 2.194 |
| 3620 | IDO1 | indoleamine 2,3-dioxygenase 1 | -3.58 | 4.008 |
| 84296 | GINS4 | GINS complex subunit 4 | 2.332 | 3.469 |
| 137964 | GPAT4 | glycerol-3-phosphate acyltransferase 4 | -0.513 | 1.477 |
| 107986939 | LOC107986939 | uncharacterized LOC107986939 | 3.285 | 7.258 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 3551 | IKBKB | inhibitor of nuclear factor kappa B kinase subunit beta | -0.434 | 1.689 |
| 6575 | SLC20A2 | solute carrier family 20 member 2 | -0.762 | 3.026 |
| 55145 | THAP1 | THAP domain containing 1 | 0.849 | 3.041 |
| 84376 | HOOK3 | hook microtubule tethering protein 3 | -0.645 | 2.113 |
| 84197 | POMK | protein O-mannose kinase | -0.705 | 2.293 |
| 23514 | SPIDR | scaffold protein involved in DNA repair | -0.615 | 2.212 |
| 1052 | CEBPD | CCAAT enhancer binding protein delta | -0.976 | 2.139 |
| 4173 | MCM4 | minichromosome maintenance complex component 4 | 2.331 | 2.71 |
| 51606 | ATP6V1H | ATPase H+ transporting V1 subunit H | 0.589 | 2.172 |
| 6917 | TCEA1 | transcription elongation factor A1 | -0.459 | 1.513 |
| 10434 | LYPLA1 | lysophospholipase 1 | 0.591 | 2.649 |
| 29088 | MRPL15 | mitochondrial ribosomal protein L15 | -0.946 | 4.413 |
| 4067 | LYN | LYN proto-oncogene, Src family tyrosine kinase | -0.909 | 1.852 |
| 79145 | CHCHD7 | coiled-coil-helix-coiled-coil-helix domain containing 7 | 0.458 | 1.368 |
| 101929398 | LOC101929398 | uncharacterized LOC101929398 | -2.362 | 1.845 |
| 100507632 | LINC00968 | long intergenic non-protein coding RNA 968 | -1.918 | 5.234 |
| 54928 | BPNT2 | 3'(2') 5'-bisphosphate nucleotidase 2 | -0.601 | 3.991 |
| 90362 | FAM110B | family with sequence similarity 110 member B | 0.813 | 1.396 |
| 137886 | UBXN2B | UBX domain protein 2B | 0.612 | 2.46 |
| 8439 | NSMAF | neutral sphingomyelinase activation associated factor | -1.049 | 3.112 |
| 9760 | TOX | thymocyte selection associated high mobility group box | 1.571 | 2.365 |
| 5862 | RAB2A | RAB2A, member RAS oncogene family | 0.441 | 1.564 |
| 55636 | CHD7 | chromodomain helicase DNA binding protein 7 | 2.487 | 5.004 |
| 105375938 | LOC105375938 | uncharacterized LOC105375938 | 2.186 | 3.861 |
| 157807 | CLVS1 | clavensin 1 | 1.704 | 1.636 |
| 100130298 | LOC100130298 | hCG1816373-like | 1.959 | 1.989 |
| 444 | ASPH | aspartate beta-hydroxylase | 1.798 | 3.904 |
| 8836 | GGH | gamma-glutamyl hydrolase | 3.017 | 4.708 |
| 253943 | YTHDF3 | YTH N6-methyladenosine RNA binding protein 3 | 0.908 | 1.805 |
| 107986950 | LOC107986950 | uncharacterized LOC107986950 | 2.422 | 1.652 |
| 23212 | RRS1 | ribosome biogenesis regulator 1 homolog | -1.801 | 6.872 |
| 137872 | ADHFE1 | alcohol dehydrogenase iron containing 1 | -1.285 | 3.373 |
| 4603 | MYBL1 | MYB proto-oncogene like 1 | -1.641 | 1.618 |
| 80124 | VCPIP1 | valosin containing protein interacting protein 1 | 1.057 | 6.907 |
| 56260 | C8orf44 | chromosome 8 putative open reading frame 44 | 0.727 | 2.377 |
| 10565 | ARFGEF1 | ADP ribosylation factor guanine nucleotide exchange factor 1 | 1.277 | 4.258 |
| 102724708 | ARFGEF1-DT | ARFGEF1 divergent transcript | 3.035 | 9.047 |
| 23471 | TRAM1 | translocation associated membrane protein 1 | -0.538 | 1.767 |
| 7013 | TERF1 | telomeric repeat binding factor 1 | 0.978 | 4.352 |
| 157869 | SBSPO | somatomedin B and thrombospondin type 1 domain containing | 1.698 | 2.084 |
| 27067 | STAU2 | staufen double-stranded RNA binding protein 2 | 1.208 | 6.195 |
| 105375902 | LOC105375902 | ubiquitin conjugating enzyme E2 W | 1.234 | 1.821 |
| 55284 | UBE2W | elongin C | 0.607 | 2.417 |
| 6921 | ELOC | transmembrane protein 70 | 0.535 | 1.649 |
| 54968 | TMEM70 | lymphocyte antigen 96 | -0.685 | 1.662 |
| 23643 | LY96 | zinc finger C2HC-type containing 1A | -1.243 | 2.839 |
| 51101 | ZC2HC1A | mitochondrial ribosomal protein S28 | -2.289 | 7.274 |
| 28957 | MRPS28 | zinc finger and BTB domain containing 10 | -0.675 | 1.591 |
| 65986 | ZBTB10 | phosphoprotein membrane anchor with glycosphingolipid microdomains 1 | -1.19 | 4.716 |
| 55824 | PAG1 | uncharacterized LOC105375924 | 1.237 | 3.357 |
| 105375924 | LOC105375924 | inositol monophosphatase 1 | 1.593 | 2.195 |
| 3612 | IMPA1 | E2F transcription factor 5 | 1.165 | 3.744 |
| 1875 | E2F5 | carbonic anhydrase 13 | -3.03 | 2.642 |
| 377677 | CA13 | WW domain containing E3 ubiquitin protein ligase 1 | -1.357 | 1.897 |
| 11059 | WWP1 | copine 3 | -1.119 | 5.802 |
| 8895 | CPNE3 | RIPK2 divergent transcript | 2.405 | 5.619 |
| 101929709 | RIPK2-DT | oxidative stress induced growth inhibitor family member 2 | -1.331 | 2.585 |
| 734 | OSGIN2 | 2,4-dienoyl-CoA reductase 1 | 0.73 | 3.24 |
| 1666 | DECRI | transmembrane protein 64 | -0.953 | 6.581 |
| 169200 | TMEM64 | N-terminal EF-hand calcium binding protein 1 | -1.03 | 1.449 |
| 64168 | NECAB1 | chromosome 8 open reading frame 88 | 3.778 | 3.268 |
| 100127983 | C8orf88 | phosphatidylinositol-4,5-bisphosphate 4-phosphatase 2 | 2.508 | 2.224 |
| 55529 | PIP4P2 | OTUD6B antisense RNA 1 (head to head) | 0.674 | 1.475 |
| 100506365 | OTUD6B-AS1 | OTU deubiquitinase 6B | -0.626 | 1.32 |
| 51633 | OTUD6B | leucine rich repeat containing 69 | -1.829 | 1.788 |
| 100130742 | LRRC69 | triple QxxK/R motif containing | 1.03 | 2.451 |
| 286144 | TRIQK | pyruvate dehydrogenase phosphatase catalytic subunit 1 | -1.239 | 6.931 |
| 54704 | PDP1 | RAD54 homolog B | 2.371 | 2.392 |
| 25788 | RAD54B | fibrinogen silencer binding protein | 2.247 | 1.792 |
| 100861412 | FSBP | cyclin E2 | 2.467 | 3.368 |
| 9134 | CCNE2 | NADH:ubiquinone oxidoreductase complex assembly factor 6 | 1.522 | 6.052 |
| 137682 | NDUFAF6 | tumor protein p53 inducible nuclear protein 1 | 0.709 | 1.494 |
| 94241 | TP53INP1 | MIR3150B host gene | 1.25 | 1.739 |
| 105375650 | MIR3150BHG | pleckstrin homology and FYVE domain containing 2 | 0.813 | 2.029 |
| 79666 | PLEKHF2 | phosphatidylserine synthase 1 | 0.688 | 3.524 |
| 9791 | PTDSS1 | uncharacterized LOC105375655 | -1.345 | 1.408 |
| 105375655 | LOC105375655 | TSPY like 5 | -3.95 | 3.868 |
| 85453 | TSPYL5 | metadherin | 0.705 | 3.035 |
| 92140 | MTDH | matrilin 2 | 4.841 | 10.449 |
| 4147 | MATN2 | ribosomal protein L30 | -0.547 | 2.009 |
| 6156 | RPL30 | reactive intermediate imine deaminase A homolog | -1.107 | 1.571 |
| 10247 | RIDA | F-box protein 43 | 3.264 | 2.153 |
| 286151 | FBXO43 | RNA polymerase II, I and III subunit K | 0.816 | 2.213 |
| 5440 | POLR2K | sperm associated antigen 1 | 2.626 | 12.773 |
| 6674 | SPAG1 | uncharacterized LOC105375669 | 1.67 | 4.224 |
| 105375669 | LOC105375669 | ring finger protein 19A, RBR E3 ubiquitin protein ligase | 0.817 | 1.781 |
| 25897 | RNF19A | poly(A) binding protein cytoplasmic 1 | -0.573 | 1.325 |
| 26986 | PABPC1 | long intergenic non-protein coding RNA 3044 | -1.83 | 1.372 |
| 105375674 | LINC03044 | zinc finger protein 706 | -0.731 | 2.9 |
| 51123 | ZNF706 | UBR5 divergent transcript | 1.249 | 3.984 |
| 101927221 | UBR5-DT | KLF transcription factor 10 | -1.215 | 3.155 |
| 7071 | KLF10 | antizyme inhibitor 1 | 1.246 | 5.874 |
| 51582 | AZIN1 | frizzled class receptor 6 | 2.723 | 4.243 |
| 8323 | FZD6 | ENY2 transcription and export complex 2 subunit 9 | 0.854 | 3.306 |
| 56943 | ENY2 | estrogen receptor binding site associated antigen 9 | -0.713 | 1.99 |
| 9166 | EBAG9 | transcriptional repressor GATA binding 1 | -1.398 | 4.329 |
| 7227 | TRPS1 | RAD21 cohesin complex component | 0.869 | 3.72 |
| 5885 | RAD21 | mediator complex subunit 30 | 1.071 | 6.176 |
| 90390 | MED30 | exostosin glycosyltransferase 1 | -1.412 | 1.929 |
| 2131 | EXT1 | ectonucleotide pyrophosphatase/phosphodiesterase 2 | -4.767 | 4.419 |
| 5168 | ENPP2 | | | |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 105375728 | LOC105375728 | uncharacterized LOC105375728 | 2.757 | 1.61 |
| 79075 | DSCC1 | DNA replication and sister chromatid cohesion 1 | 3.428 | 4.467 |
| 27085 | MTBP | MDM2 binding protein | 1.348 | 2.026 |
| 29028 | ATAD2 | ATPase family AAA domain containing 2 | 2.201 | 4.295 |
| 114907 | FBXO32 | F-box protein 32 | -1.714 | 1.854 |
| 101927612 | RNF139-DT | RNF139 divergent transcript | 1.063 | 1.511 |
| 4715 | NDUFB9 | NADH:ubiquinone oxidoreductase subunit B9 | 0.526 | 1.679 |
| 9788 | MTSS1 | MTSS I-BAR domain containing 1 | -1.891 | 2.205 |
| 105375740 | LOC105375740 | uncharacterized LOC105375740 | -2.219 | 4.272 |
| 6713 | SQLE | squalene epoxidase | 0.91 | 1.504 |
| 286053 | NSMC2 | NSE2 (MMS21) homolog, SMC5-SMC6 complex SUMO ligase | 0.556 | 2.141 |
| 100130231 | LINC00861 | long intergenic non-protein coding RNA 861 | -4.588 | 5.763 |
| 157638 | LRATD2 | LRAT domain containing 2 | 1.354 | 1.439 |
| 5820 | PVT1 | Pvt1 oncogene | -1.013 | 2.276 |
| 51571 | CYRIB | CYFIP related Rac1 interactor B | 0.601 | 1.881 |
| 100847051 | MIR5194 | microRNA 5194 | 1.294 | 1.748 |
| 50807 | ASAP1 | ArfGAP with SH3 domain, ankyrin repeat and PH domain 1 | 1.091 | 5.736 |
| 23167 | EFR3A | EFR3 homolog A | -1.34 | 7.851 |
| 23639 | DNAAF11 | dynein axonemal assembly factor 11 | 1.901 | 3.972 |
| 137835 | TMEM71 | transmembrane protein 71 | 0.932 | 4.713 |
| 51105 | PHF20L1 | PHD finger protein 20 like 1 | 0.682 | 3.687 |
| 7038 | TG | thyroglobulin | 1.344 | 2.499 |
| 6503 | SLA | Src like adaptor | 0.844 | 2.209 |
| 100302522 | PTCSC1 | papillary thyroid carcinoma susceptibility candidate 1 | 0.858 | 2.69 |
| 105375769 | LOC105375769 | uncharacterized LOC105375769 | 2.542 | 3.729 |
| 6482 | ST3GAL1 | ST3 beta-galactoside alpha-2,3-sialyltransferase 1 | -0.637 | 2.486 |
| 57623 | ZFAT | zinc finger and AT-hook domain containing | -0.839 | 2.977 |
| 359809 | PEG13 | paternally expressed 13 | 2.738 | 3.644 |
| 54108 | CHRAC1 | chromatin accessibility complex subunit 1 | -0.524 | 3.539 |
| 27161 | AGO2 | argonaute RISC catalytic component 2 | -0.67 | 2.011 |
| 5747 | PTK2 | protein tyrosine kinase 2 | -2.971 | 5.224 |
| 101927963 | DENND3-AS1 | DENND3 antisense RNA 1 | 1.004 | 2.364 |
| 22898 | DENND3 | DENN domain containing 3 | 0.96 | 3.255 |
| 105375785 | LOC105375785 | uncharacterized LOC105375785 | 1.077 | 4.297 |
| 57210 | SLC45A4 | solute carrier family 45 member 4 | 1.304 | 1.691 |
| 101928037 | LOC101928037 | uncharacterized LOC101928037 | -3.504 | 3.127 |
| 11156 | PTP4A3 | protein tyrosine phosphatase 4A3 | -1.951 | 2.284 |
| 203062 | TSNARE1 | t-SNARE domain containing 1 | -0.985 | 2.616 |
| 575 | ADGRB1 | adhesion G protein-coupled receptor B1 | -3.048 | 4.458 |
| 8629 | JRK | Jrk helix-turn-helix protein | 1.412 | 2.987 |
| 137797 | LYPD2 | LY6/PLAUR domain containing 2 | -4.838 | 3.303 |
| 111188157 | LYNX1-SLURP2 | LYNX1-SLURP2 readthrough | -4.855 | 3.378 |
| 66004 | LYNX1 | Ly6/neurotoxin 1 | -3.799 | 5.023 |
| 4061 | LY6E | lymphocyte antigen 6 family member E | -3.827 | 4.588 |
| 286122 | LINC02904 | long intergenic non-protein coding RNA 2904 | -2.582 | 1.966 |
| 107986906 | LOC107986906 | uncharacterized LOC107986906 | 2.518 | 2.26 |
| 286128 | ZFP41 | ZFP41 zinc finger protein | -0.874 | 1.58 |
| 114822 | RHPN1 | rhophilin Rho GTPase binding protein 1 | 1.337 | 2.723 |
| 642475 | MROH6 | maestro heat like repeat family member 6 | 2.178 | 10.135 |
| 93100 | NAPRT | nicotinate phosphoribosyltransferase | 0.902 | 4.302 |
| 84948 | TIGD5 | tigger transposable element derived 5 | -1.085 | 2.118 |
| 286075 | ZNF707 | zinc finger protein 707 | -0.736 | 2.309 |
| 340371 | NRBP2 | nuclear receptor binding protein 2 | -1.092 | 3.871 |
| 83481 | EPPK1 | epiplakin 1 | 1.869 | 1.45 |
| 84875 | PARP10 | poly(ADP-ribose) polymerase family member 10 | -0.762 | 1.358 |
| 375686 | SPATC1 | spermatogenesis and centriole associated 1 | 2.148 | 5.461 |
| 392275 | SMPD5 | sphingomyelin phosphodiesterase 5 (pseudogene) | 3.031 | 5.021 |
| 26873 | OPLAH | 5-oxoprolinase, ATP-hydrolysing | 1.214 | 2.249 |
| 54512 | EXOSC4 | exosome component 4 | 0.967 | 2.553 |
| 8733 | GPAA1 | glycosylphosphatidylinositol anchor attachment 1 | 0.967 | 4.977 |
| 51236 | HGH1 | HGH1 homolog | -0.568 | 1.449 |
| 727957 | MROH1 | maestro heat like repeat family member 1 | 0.446 | 1.742 |
| 23246 | BOP1 | BOP1 ribosomal biogenesis factor | -0.93 | 5.131 |
| 8694 | DGAT1 | diacylglycerol O-acyltransferase 1 | 0.693 | 4.856 |
| 102465511 | MIR6848 | microRNA 6848 | 0.674 | 1.867 |
| 203054 | ADCK5 | aarF domain containing kinase 5 | -0.695 | 2.125 |
| 51160 | VPS28 | VPS28 subunit of ESCRT-I | 0.366 | 1.818 |
| 4796 | TONSL | tonsoku like, DNA repair protein | 1.713 | 4.66 |
| 100287098 | TONSL-AS1 | TONSL antisense RNA 1 | 1.34 | 1.962 |
| 90990 | KIFC2 | kinesin family member C2 | -0.73 | 2.573 |
| 8928 | FOXH1 | forkhead box H1 | -0.743 | 1.831 |
| 9401 | RECQL4 | RecQ like helicase 4 | 2.63 | 4.483 |
| 414919 | C8orf82 | chromosome 8 open reading frame 82 | -1.332 | 8.138 |
| 80778 | ZNF34 | zinc finger protein 34 | -1.267 | 4.9 |
| 7564 | ZNF16 | zinc finger protein 16 | -1.239 | 3.166 |
| 65265 | C8orf33 | chromosome 8 open reading frame 33 | -0.615 | 1.875 |
| 55871 | ZNG1A | Zn regulated GTPase metallocprotein activator 1A | -0.806 | 2.764 |
| 107987043 | LOC107987043 | uncharacterized LOC107987043 | 0.984 | 3.033 |
| 7436 | VLDLR | very low density lipoprotein receptor | 3.132 | 7.499 |
| 10171 | RCL1 | RNA terminal phosphate cyclase like 1 | 1.326 | 4.406 |
| 3717 | JAK2 | Janus kinase 2 | -0.716 | 1.32 |
| 57589 | RIC1 | RIC1 homolog, RAB6A GEF complex partner 1 | -1.417 | 5.603 |
| 26953 | RANBP6 | RAN binding protein 6 | 0.76 | 1.563 |
| 115426 | UHRF2 | ubiquitin like with PHD and ring finger domains 2 | 0.656 | 1.456 |
| 90871 | DMAC1 | distal membrane arm assembly component 1 | 0.695 | 1.564 |
| 286343 | LURAP1L | leucine rich adaptor protein 1 like | 1.855 | 1.488 |
| 105375981 | LOC105375981 | tetratricopeptide repeat domain 39B | -3.049 | 3.499 |
| 158219 | TTC39B | DENN domain containing 4C | -2.748 | 6.617 |
| 55667 | DENND4C | MLLT3 super elongation complex subunit | -0.62 | 1.802 |
| 4300 | MLLT3 | focadhesin | -2.532 | 3.859 |
| 54914 | FOCAD | kelch like family member 9 | 1.118 | 1.735 |
| 55958 | KLHL9 | methylthioadenosine phosphorylase | 0.715 | 1.716 |
| 4507 | MTAP | cyclin dependent kinase inhibitor 2A | -0.672 | 2.043 |
| 1029 | CDKN2A | intralflagellar transport 74 | 2.001 | 2.689 |
| 80173 | IFT74 | MOB kinase activator 3B | -0.897 | 3.19 |
| 79817 | MOB3B | C9orf72-SMCR8 complex subunit | -2.414 | 11.993 |
| 107987057 | LOC107987057 | aconitase 1 | -1.469 | 1.676 |
| 203228 | C9orf72 | RNA sensor RIG-I | -1.643 | 11.388 |
| 48 | ACO1 | small integral membrane protein 27 | -1.259 | 3.766 |
| 23586 | RIGI | | -1.655 | 1.929 |
| 100129250 | SMIM27 | | 1.082 | 4.786 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|-----------------------|--|----------|----------|
| 4712 | NDUFB6 | NADH:ubiquinone oxidoreductase subunit B6 | 0.512 | 1.71 |
| 360 | AQP3 | aquaporin 3 (Gill blood group) | -3.146 | 3.19 |
| 304 | ANXA2P2 | annexin A2 pseudogene 2 | -1.926 | 8.021 |
| 51271 | UBAP1 | ubiquitin associated protein 1 | 0.987 | 2.884 |
| 114224 | LOC114224 | uncharacterized LOC114224 | 1.4 | 1.843 |
| 347240 | KIF24 | kinesin family member 24 | 1.234 | 6.491 |
| 375704 | ENHO | energy homeostasis associated | -4.32 | 3.87 |
| 10280 | SIGMAR1 | sigma non-opioid intracellular receptor 1 | -0.704 | 2.322 |
| 2592 | GALT | galactose-1-phosphate uridylyltransferase | -0.468 | 2.007 |
| 107987063 | LOC107987063 | | 1.03 | 1.522 |
| 2189 | FANCG | FA complementation group G | 1.813 | 3.225 |
| 10497 | UNC13B | unc-13 homolog B | -1.655 | 5.45 |
| 9853 | RUSC2 | RUN and SH3 domain containing 2 | -1.124 | 3.479 |
| 7016 | TESK1 | testis associated actin remodelling kinase 1 | -1.165 | 6.687 |
| 971 | CD72 | CD72 molecule | -2.255 | 3.608 |
| 203260 | CCDC107 | coiled-coil domain containing 107 | -0.619 | 1.394 |
| 84681 | HINT2 | histidine triad nucleotide binding protein 2 | -0.875 | 1.465 |
| 51754 | TMEM8B | transmembrane protein 8B | -4.398 | 9.897 |
| 8434 | RECK | reversion inducing cysteine rich protein with kazal motifs | -2.667 | 16.488 |
| 9833 | MELK | maternal embryonic leucine zipper kinase | 3.092 | 2.721 |
| 5079 | PAX5 | paired box 5 | -6.015 | 12.684 |
| 64425 | POLR1E | RNA polymerase I subunit E | 1.07 | 2.322 |
| 51010 | EXOSC3 | exosome component 3 | 2.718 | 7.633 |
| 105376037 | LOC105376037 | uncharacterized LOC105376037 | 1.062 | 3.067 |
| 79269 | DCAF10 | DDB1 and CUL4 associated factor 10 | 1.394 | 9.476 |
| 92014 | SLC25A51 | solute carrier family 25 member 51 | 0.933 | 1.417 |
| 6461 | SHB | SH2 domain containing adaptor protein B | -2.407 | 6.015 |
| 219 | ALDH1B1 | aldehyde dehydrogenase 1 family member B1 | 2.852 | 3.465 |
| 79937 | CNTNAP3 | contactin associated protein family member 3 | 2.239 | 4.301 |
| 107986991 | LOC107986991 | ankyrin repeat domain 20 family member A2, pseudogene | 3.673 | 4.101 |
| 441430 | ANKRD20A2P | family with sequence similarity 95 member B1 | 4.077 | 6.226 |
| 100133036 | FAM95B1 | uncharacterized LOC107984035 | 1.446 | 1.834 |
| 107984035 | LOC107984035 | | 1.185 | 1.836 |
| 112268035 | LOC112268035 | uncharacterized LOC101928906 | 2.363 | 1.395 |
| 101928906 | LOC101928906 | contactin associated protein family member 3B | 2.89 | 3.554 |
| 728577 | CNTNAP3B | contactin associated protein family member 3C | 2.899 | 3.531 |
| 100289279 | CNTNAP3C | family with sequence similarity 27 member E4 | 2.354 | 1.723 |
| 107987001 | FAM27E4 | ANKRD20A4-ANKRD20A20P readthrough | 3.608 | 6.257 |
| 110006327 | ANKRD20A4-ANKRD20A20P | ankyrin repeat domain 20 family member A4, pseudogene | 3.268 | 2.925 |
| 728747 | ANKRD20A4P | family with sequence similarity 95 member B1-like | 3.938 | 5.905 |
| 105379252 | LOC105379252 | ankyrin repeat domain 20 family member A3, pseudogene | 3.941 | 4.552 |
| 441425 | ANKRD20A3P | | 1.146 | 3.761 |
| 107987072 | LOC107987072 | CNTNAP3 pseudogene 2 | 2.92 | 3.147 |
| 643827 | CNTNAP3P2 | family with sequence similarity 27 member E3 | 2.467 | 1.639 |
| 100131997 | FAM27E3 | ankyrin repeat domain 20 family member A1 | 3.079 | 3.21 |
| 84210 | ANKRD20A1 | long intergenic non-protein coding RNA 1506 | 1.889 | 3.514 |
| 101927015 | LINC01506 | phosphatidylinositol-4-phosphate 5-kinase type 1 beta | 1.324 | 10.587 |
| 8395 | PIP5K1B | uncharacterized LOC101927069 | -2.021 | 4.661 |
| 101927069 | LOC101927069 | frataxin | 0.711 | 1.671 |
| 2395 | FXN | tight junction protein 2 | -1.151 | 4.105 |
| 9414 | TJP2 | amyloid beta precursor protein binding family A member 1 | -5.326 | 8.365 |
| 320 | APBA1 | protein prenyltransferase alpha subunit repeat containing 1 | 0.427 | 1.825 |
| 375743 | PTAR1 | cell migration inducing hyaluronidase 2 | -0.855 | 2.172 |
| 23670 | CEMIP2 | abhydrolase domain containing 17B, depalmitoylase | 0.53 | 1.679 |
| 51104 | ABHD17B | long intergenic non-protein coding RNA 1504 | -0.648 | 1.522 |
| 100507540 | LINC01504 | aldehyde dehydrogenase 1 family member A1 | -2.218 | 2.939 |
| 216 | ALDH1A1 | annexin A1 | 1.41 | 6.351 |
| 301 | ANXA1 | transient receptor potential cation channel subfamily M member 6 | 3.244 | 3.841 |
| 140803 | TRPM6 | chromosome 9 open reading frame 40 | 1.934 | 3.326 |
| 55071 | C9orf40 | nicotinamide riboside kinase 1 | 0.934 | 2.23 |
| 54981 | NMRK1 | osteoclast stimulating factor 1 | 0.654 | 2.73 |
| 26578 | OSTF1 | proprotein convertase subtilisin/kexin type 5 | -2.038 | 3.544 |
| 5125 | PCSK5 | glucosaminyl (N-acetyl) transferase 1 | 1.358 | 3.012 |
| 2650 | GCNT1 | vacuolar protein sorting 13 homolog A | 1.598 | 5.512 |
| 23230 | VPS13A | G protein subunit alpha q | 0.982 | 5.469 |
| 2776 | GNAQ | uncharacterized LOC107987081 | 0.922 | 2.713 |
| 107987081 | LOC107987081 | centrosomal protein 78 | 1.238 | 2.256 |
| 84131 | CEP78 | phosphoserine aminotransferase 1 | 4.17 | 11.612 |
| 29968 | PSAT1 | TLE family member 1, transcriptional corepressor | 3.015 | 3.683 |
| 7088 | TLE1 | IDNK gluconokinase | 0.756 | 2.055 |
| 414328 | IDNK | uncharacterized LOC101927603 | 1.979 | 5.875 |
| 101927603 | LOC101927603 | ATP/GTP binding carboxypeptidase 1 | 1.081 | 14.701 |
| 23287 | AGTPBP1 | golgi membrane protein 1 | -2.281 | 7.282 |
| 51280 | GOLM1 | death associated protein kinase 1 | -1.915 | 6.284 |
| 1612 | DAPK1 | cathepsin L | -2.3 | 2.982 |
| 1514 | CTSL | cyclin dependent kinase 20 | -1.479 | 1.584 |
| 23552 | CDK20 | replaced by ID 1903 | -2.512 | 6.059 |
| 286223 | C9orf47 | sphingosine-1-phosphate receptor 3 | -2.128 | 3.793 |
| 1903 | S1PR3 | CDC28 protein kinase regulatory subunit 2 | 2.082 | 5.432 |
| 1164 | CKS2 | semaphorin 4D | -0.834 | 1.621 |
| 10507 | SEMA4D | uncharacterized LOC105376137 | -1.223 | 1.383 |
| 105376137 | LOC105376137 | growth arrest and DNA damage inducible gamma | 2.315 | 3.221 |
| 10912 | GADD45G | long intergenic non-protein coding RNA 3062 | 4.69 | 4.254 |
| 100129066 | LINC03062 | uncharacterized LOC101927954 | 4.058 | 3.675 |
| 102724237 | LOC102724237 | sushi domain containing 3 | 0.644 | 1.692 |
| 101927954 | LOC101927954 | family with sequence similarity 120A | 2.666 | 6.788 |
| 203328 | SUSD3 | uncharacterized LOC100132077 | -0.493 | 1.548 |
| 23196 | FAM120A | fructose-bisphosphatase 1 | 1.579 | 2.081 |
| 100132077 | LOC100132077 | ERCC excision repair 6 like 2 | -1.913 | 3.538 |
| 2203 | FBP1 | zinc finger protein 367 | -0.535 | 1.818 |
| 375748 | ERCC6L2 | hyaluronan binding protein 4 | 3.061 | 4.087 |
| 195828 | ZNF367 | cell division cycle 14B | -1.931 | 3.882 |
| 22927 | HABP4 | peroxiredoxin like 2C | 1.871 | 2.942 |
| 8555 | CDC14B | major facilitator superfamily domain containing 14C, pseudogene | -0.799 | 2.855 |
| 195827 | PRXL2C | NUTM family member 2G | 1.041 | 3.552 |
| 84278 | MFSD14CP | XPA, DNA damage recognition and repair factor | 0.748 | 1.6 |
| 441457 | NUTM2G | acidic nuclear phosphoprotein 32 family member B | -0.5 | 1.629 |
| 7507 | XPA | N-acetylneuraminate synthase | 0.734 | 4.372 |
| 10541 | ANP32B | tripartite motif containing 14 | -0.762 | 5.213 |
| 54187 | NANS | | -1.374 | 4.882 |
| 9830 | TRIM14 | | | |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|----------------|--|----------|----------|
| 7464 | CORO2A | coronin 2A | 2.231 | 9.319 |
| 203286 | ANKS6 | ankyrin repeat and sterile alpha motif domain containing 6 | -2.324 | 2.503 |
| 7046 | TGFBR1 | transforming growth factor beta receptor 1 | 1.22 | 9.538 |
| 85365 | ALG2 | ALG2 alpha-1,3/1,6-mannosyltransferase | -0.741 | 2.488 |
| 55014 | STX17 | syntaxin 17 | -0.782 | 1.554 |
| 91283 | MSANTD3 | Myb/SANT DNA binding domain containing 3 | 1.682 | 3.156 |
| 100526694 | MSANTD3-TMEFF1 | MSANTD3-TMEFF1 readthrough | 1.456 | 1.84 |
| 7743 | ZNF189 | zinc finger protein 189 | 0.977 | 4.687 |
| 116443 | GRIN3A | glutamate ionotropic receptor NMDA type subunit 3A | -1.407 | 1.885 |
| 10592 | SMC2 | structural maintenance of chromosomes 2 | 1.503 | 1.805 |
| 55335 | NIPSNAP3B | nipsnap homolog 3B | -1.859 | 2.332 |
| 23446 | SLC44A1 | solute carrier family 44 member 1 | 0.838 | 1.495 |
| 107987107 | LOC107987107 | uncharacterized LOC107987107 | 1.716 | 1.747 |
| 5887 | RAD23B | RAD23 homolog B, nucleotide excision repair protein | 0.574 | 1.356 |
| 9314 | KLF4 | KLF transcription factor 4 | -1.872 | 5.157 |
| 107987112 | LOC107987112 | uncharacterized LOC107987112 | -3.264 | 4.049 |
| 8518 | ELP1 | elongator acetyltransferase complex subunit 1 | 0.481 | 1.371 |
| 8727 | CTTNAL1 | catenin alpha like 1 | 2.725 | 3.111 |
| 7295 | TXN | thioredoxin | 1.702 | 7.587 |
| 1902 | LPAR1 | lysophosphatidic acid receptor 1 | -2.735 | 4.697 |
| 22949 | PTGR1 | prostaglandin reductase 1 | 2.35 | 4.933 |
| 552891 | DNAJC25-GNG10 | DNAJC25-GNG10 readthrough | 1.547 | 13.576 |
| 2790 | GNG10 | G protein subunit gamma 10 | 1.585 | 14.229 |
| 158401 | SHOC1 | shortage in chiasmata 1 | 3.29 | 9.424 |
| 7357 | UGCG | UDP-glucose ceramide glucosyltransferase | 3.619 | 5.954 |
| 100616114 | MIR4668 | microRNA 4668 | 3.528 | 3.883 |
| 105376220 | LINC02977 | long intergenic non-protein coding RNA 2977 | -1.468 | 6.07 |
| 64420 | SUSD1 | sushi domain containing 1 | -1.156 | 9.935 |
| 84263 | HSDL2 | hydroxysteroid dehydrogenase like 2 | 0.868 | 1.496 |
| 58493 | INIP | INTS3 and NABP interacting protein | -0.63 | 1.568 |
| 401548 | SNX30 | sorting nexin family member 30 | -1.497 | 10.32 |
| 107987118 | LOC107987118 | replaced by ID 401548 | -1.621 | 4.002 |
| 57864 | SLC46A2 | solute carrier family 46 member 2 | -2.339 | 3.439 |
| 112268054 | LOC112268054 | solute carrier family 46 member 2 | -2.569 | 3.592 |
| 100128385 | FAM225B | family with sequence similarity 225 member B | -4.469 | 6.608 |
| 286333 | FAM225A | family with sequence similarity 225 member A | -4.548 | 7.046 |
| 9128 | PRPF4 | pre-mRNA processing factor 4 | -0.469 | 1.68 |
| 54836 | BSPRY | B-box and SPRY domain containing | 2.686 | 2.252 |
| 81932 | HDHD3 | haloacid dehalogenase like hydrolase domain containing 3 | 0.885 | 1.58 |
| 114991 | ZNF618 | zinc finger protein 618 | -3.401 | 8.898 |
| 5004 | ORM1 | orosomucoid 1 | 3.962 | 6.89 |
| 5005 | ORM2 | orosomucoid 2 | 3.825 | 7.282 |
| 80709 | AKNA | AT-hook transcription factor | -0.671 | 1.77 |
| 25861 | WHRN | whirlin | -1.377 | 1.645 |
| 203197 | TMEM268 | transmembrane protein 268 | -3.338 | 17.18 |
| 9966 | TNFSF15 | TNF superfamily member 15 | -3.031 | 3.263 |
| 944 | TNFSF8 | TNF superfamily member 8 | -2.046 | 7.89 |
| 7099 | TLR4 | toll like receptor 4 | -0.854 | 1.408 |
| 55755 | CDK5RAP2 | CDK5 regulatory subunit associated protein 2 | 0.562 | 1.556 |
| 26190 | FBXW2 | F-box and WD repeat domain containing 2 | 1.612 | 9.787 |
| 5711 | PSMD5 | proteasome 26S subunit, non-ATPase 5 | 0.63 | 2.139 |
| 26147 | PHF19 | PHD finger protein 19 | 0.759 | 1.991 |
| 2934 | GSN | gelsolin | 2.29 | 7.604 |
| 57000 | GSN-AS1 | GSN antisense RNA 1 | 2.149 | 6.513 |
| 2040 | STOM | stomatin | 2.779 | 4.873 |
| 102723324 | LOC102723324 | uncharacterized LOC102723324 | 1.271 | 1.696 |
| 2681 | GGTA1 | glycoprotein alpha-galactosyltransferase 1 (inactive) | 1.626 | 2.205 |
| 158135 | TTLL11 | tubulin tyrosine ligase like 11 | -2.076 | 7.287 |
| 92399 | MRRF | mitochondrial ribosome recycling factor | -0.867 | 3.469 |
| 5742 | PTGS1 | prostaglandin-endoperoxide synthase 1 | -1.623 | 2.349 |
| 54542 | RC3H2 | ring finger and CCCH-type domains 2 | -0.675 | 5.9 |
| 23637 | RABGAP1 | RAB GTPase activating protein 1 | -0.779 | 5.53 |
| 286204 | CRB2 | crumbs cell polarity complex component 2 | -1.284 | 3.96 |
| 57706 | DENND1A | DENN domain containing 1A | -0.932 | 4.155 |
| 100129034 | LOC100129034 | uncharacterized LOC100129034 | 0.392 | 1.332 |
| 2649 | NR6A1 | nuclear receptor subfamily 6 group A member 1 | 1.32 | 2.145 |
| 11224 | RPL35 | ribosomal protein L35 | -0.427 | 1.436 |
| 81873 | ARPC5L | actin related protein 2/3 complex subunit 5 like | 0.931 | 4.044 |
| 5537 | PPP6C | protein phosphatase 6 catalytic subunit | 0.376 | 1.468 |
| 79109 | MAPKAP1 | MAPK associated protein 1 | -0.395 | 1.885 |
| 403341 | ZBTB34 | zinc finger and BTB domain containing 34 | 0.861 | 4.077 |
| 9649 | RALGPS1 | Ral GEF with PH domain and SH3 binding motif 1 | 0.957 | 2.584 |
| 105376278 | LOC105376278 | uncharacterized LOC105376278 | 1.062 | 1.891 |
| 29988 | SLC2A8 | solute carrier family 2 member 8 | -2.168 | 8.515 |
| 6136 | RPL12 | ribosomal protein L12 | -0.634 | 2.09 |
| 90678 | LRSAM1 | leucine rich repeat and sterile alpha motif containing 1 | 0.835 | 5.757 |
| 64855 | NIBAN2 | niban apoptosis regulator 2 | -1.775 | 3.103 |
| 138428 | PTRH1 | peptidyl-tRNA hydrolase 1 homolog | -1.432 | 2.148 |
| 286207 | CFAP157 | cilia and flagella associated protein 157 | -1.314 | 2.198 |
| 10044 | SH2D3C | SH2 domain containing 3C | -1.191 | 2.365 |
| 107987132 | LOC107987132 | uncharacterized LOC107987132 | -1.545 | 2.482 |
| 2356 | FPGS | folylpolyglutamate synthase | -0.854 | 3.088 |
| 2022 | ENG | endoglin | -3.14 | 5.744 |
| 102723566 | LOC102723566 | uncharacterized LOC102723566 | -2.36 | 5.907 |
| 203 | AK1 | adenylate kinase 1 | -1.957 | 4.452 |
| 30815 | ST6GALNAC6 | ST6 N-acetylgalactosaminide alpha-2,6-sialyltransferase 6 | -1.642 | 7.101 |
| 27090 | ST6GALNAC4 | ST6 N-acetylgalactosaminide alpha-2,6-sialyltransferase 4 | -2.241 | 9.833 |
| 8818 | DPM2 | dolichyl-phosphate mannosyltransferase subunit 2, regulatory | -0.62 | 1.972 |
| 399665 | EEIG1 | estrogen-induced osteoclastogenesis regulator 1 | -2.613 | 4.384 |
| 114789 | SLC25A25 | solute carrier family 25 member 25 | -1.063 | 1.964 |
| 3934 | LCN2 | lipocalin 2 | 3.62 | 3.376 |
| 79095 | BBLN | bublin coiled coil protein | 1.075 | 4.794 |
| 2801 | GOLGA2 | golgin A2 | 0.588 | 1.614 |
| 26995 | TRUB2 | TruB pseudouridine synthase family member 2 | -0.901 | 3.236 |
| 10999 | SLC27A4 | solute carrier family 27 member 4 | -0.577 | 2.149 |
| 89891 | DYNC2I2 | dynein 2 intermediate chain 2 | 2.616 | 3.713 |
| 84885 | ZDHHC12 | zinc finger DHHC-type palmitoyltransferase 12 | 1.059 | 3.919 |
| 54662 | TBC1D13 | TBC1 domain family member 13 | 0.641 | 3.536 |
| 2021 | ENDOG | endonuclease G | -0.778 | 2.436 |
| 56904 | SH3GLB2 | SH3 domain containing GRB2 like, endophilin B2 | 0.601 | 2.448 |
| 84895 | MIGA2 | mitoguardin 2 | 0.721 | 3.203 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 5524 | PTPA | protein phosphatase 2 phosphatase activator | -0.435 | 1.451 |
| 101929331 | LINC02975 | long intergenic non-protein coding RNA 2975 | -1.504 | 1.819 |
| 414318 | LINC02913 | long intergenic non-protein coding RNA 2913 | -1.905 | 1.775 |
| 100506119 | LINC01503 | long intergenic non-protein coding RNA 1503 | -1.308 | 2.184 |
| 100506190 | LINC00963 | long intergenic non-protein coding RNA 963 | -1.11 | 2.351 |
| 140459 | ASB6 | ankyrin repeat and SOCS box containing 6 | 0.568 | 2.86 |
| 9536 | PTGES | prostaglandin E synthase | 1.791 | 2.344 |
| 10868 | USP20 | ubiquitin specific peptidase 20 | 1.486 | 7.439 |
| 8939 | FUBP3 | far upstream element binding protein 3 | -1.353 | 8.059 |
| 25 | ABL1 | ABL proto-oncogene 1, non-receptor tyrosine kinase | -0.728 | 4.916 |
| 286336 | FAM78A | family with sequence similarity 78 member A | -0.482 | 1.68 |
| 84814 | PLPP7 | phospholipid phosphatase 7 (inactive) | -2.557 | 3.142 |
| 2889 | RAPGEF1 | Rap guanine nucleotide exchange factor 1 | -1.384 | 10.879 |
| 84628 | NTNG2 | netrin G2 | 2.34 | 2.763 |
| 23064 | SETX | senataxin | -1.008 | 5.647 |
| 64794 | DDX31 | DEAD-box helicase 31 | -1.333 | 5.159 |
| 9329 | GTF3C4 | general transcription factor IIIC subunit 4 | -0.873 | 2.841 |
| 26301 | GBGT1 | globoside alpha-1,3-N-acetylgalactosaminyltransferase 1 (FORS blood group) | -1.969 | 5.681 |
| 28 | ABO | ABO, alpha 1-3-N-acetylgalactosaminyltransferase and alpha 1-3-galactosyltransferase | -5.536 | 7.661 |
| 6835 | SURF2 | surfiet 2 | -0.772 | 2.346 |
| 6836 | SURF4 | surfiet 4 | 0.751 | 2.645 |
| 57109 | REXO4 | REX4 homolog, 3'-5' exonuclease | -0.988 | 4.995 |
| 11094 | CACFD1 | calcium channel flower domain containing 1 | -1.297 | 4.68 |
| 11182 | SLC2A6 | solute carrier family 2 member 6 | -2.95 | 27.869 |
| 7410 | VAV2 | vav guanine nucleotide exchange factor 2 | -3.448 | 7.387 |
| 266655 | BRD3OS | BRD3 opposite strand | -1.095 | 3.521 |
| 8019 | BRD3 | bromodomain containing 3 | -0.453 | 1.452 |
| 6256 | RXRA | retinoid X receptor alpha | -0.957 | 2.317 |
| 105376314 | LOC105376314 | uncharacterized LOC105376314 | 1.499 | 1.646 |
| 10439 | OLFM1 | olfactomedin 1 | -4.282 | 9.586 |
| 9858 | PPP1R26 | protein phosphatase 1 regulatory subunit 26 | -2.585 | 7.791 |
| 51116 | MRPS2 | mitochondrial ribosomal protein S2 | -1.288 | 4.243 |
| 101928525 | LOC101928525 | uncharacterized LOC101928525 | -1.273 | 3.371 |
| 157922 | CAMSAP1 | calmodulin regulated spectrin associated protein 1 | -0.542 | 2.173 |
| 10422 | UBAC1 | UBA domain containing 1 | -0.628 | 3.303 |
| 138151 | NACC2 | NACC family member 2 | -1.052 | 2.101 |
| 105376322 | LOC105376322 | quiescin sulfhydryl oxidase 2 | -1.077 | 1.571 |
| 169714 | QSOX2 | G protein signaling modulator 1 | -0.763 | 2.276 |
| 26086 | GPSM1 | caspase recruitment domain family member 9 | -2.532 | 4.797 |
| 64170 | CARD9 | endosome associated trafficking regulator 1 | -1.029 | 3.899 |
| 10807 | ENTR1 | SEC16 homolog A, endoplasmic reticulum export factor | -0.825 | 2.876 |
| 9919 | SEC16A | 1-acylglycerol-3-phosphate O-acyltransferase 2 | 0.394 | 2.08 |
| 10555 | AGPAT2 | divergent protein kinase domain 1B | 1.115 | 7.564 |
| 138311 | DIPK1B | CCDC183 antisense RNA 1 | 0.981 | 2.797 |
| 100131193 | CCDC183-AS1 | RAB, member RAS oncogene family like 6 | 0.753 | 1.765 |
| 55684 | RABL6 | apical junction component 1 homolog | 0.467 | 1.863 |
| 389813 | AJM1 | TNF receptor associated factor 2 | 1.681 | 1.761 |
| 7186 | TRAF2 | F-box and WD repeat domain containing 5 | 1.031 | 4.587 |
| 54461 | FBXW5 | ATP binding cassette subfamily A member 2 | 0.834 | 6.544 |
| 20 | ABCA2 | long intergenic non-protein coding RNA 2908 | 1.335 | 4.266 |
| 401563 | LINC02908 | fucosyltransferase 7 | 1.375 | 11.051 |
| 2529 | FUT7 | ectonucleoside triphosphate diphosphohydrolase 2 | 1.239 | 3.835 |
| 954 | ENTPD2 | UDP-N-acetylglucosamine pyrophosphorylase 1 like 1 | 4.858 | 5.599 |
| 91373 | UAP1L1 | MAN1B1 divergent transcript | -1.66 | 3.302 |
| 100289341 | MAN1B1-DT | dipeptidyl peptidase 7 | -1.259 | 2.054 |
| 29952 | DPP7 | taperin | -1.156 | 4.144 |
| 286262 | TPRN | transmembrane protein 203 | -1.08 | 4.348 |
| 94107 | TMEM203 | tubulin beta 4B class IVb | -0.923 | 2.287 |
| 10383 | TUBB4B | family with sequence similarity 166 member A | 1.277 | 6.511 |
| 401565 | FAM166A | NOTCH regulated ankyrin repeat protein | 1.256 | 4.882 |
| 441478 | NRARP | NADPH oxidase activator 1 | -2.738 | 2.452 |
| 10811 | NOXA1 | NMDA receptor synaptosomal signaling and neuronal migration factor | -2.399 | 6.271 |
| 26012 | NSMF | patatin like phospholipase domain containing 7 | -3.294 | 14.225 |
| 375775 | PNPLA7 | arrestin domain containing 1 | -1.417 | 1.991 |
| 92714 | ARRDC1 | family with sequence similarity 157 member B | 0.385 | 1.423 |
| 100132403 | FAM157B | uncharacterized LOC105376333 | 1.154 | 3.922 |
| 112267861 | LOC112267861 | IDI2 antisense RNA 1 | 1.377 | 5.722 |
| 105376333 | LOC105376333 | isopentenyl-diphosphate delta isomerase 1 | 1.537 | 8.333 |
| 55853 | IDI2-AS1 | WD repeat domain 37 | 1.083 | 2.575 |
| 3422 | IDI1 | adenosine deaminase RNA specific B2 (inactive) | 1.06 | 2.859 |
| 22884 | WDR37 | phosphofructokinase, platelet | 0.71 | 4.742 |
| 105 | ADARB2 | neuroepithelial cell transforming 1 | 4.533 | 6.889 |
| 5214 | PFKP | ankyrin repeat and SOCS box containing 13 | -1.515 | 3.096 |
| 10276 | NET1 | transcription activation suppressor family member 2 | 1.448 | 2.416 |
| 79754 | ASB13 | ankyrin repeat domain 16 | -1.145 | 2.286 |
| 54906 | TASOR2 | interleukin 15 receptor subunit alpha | -0.534 | 2.963 |
| 54522 | ANKRD16 | uncharacterized LOC105376333 | -1.531 | 2.643 |
| 3601 | IL15RA | RNA binding motif protein 17 | -2.342 | 7.296 |
| 107984200 | LOC107984200 | long intergenic non-protein coding RNA 2649 | -2.187 | 11.041 |
| 84991 | RBM17 | long intergenic non-protein coding RNA 2656 | 0.505 | 2.73 |
| 399715 | LINC02649 | Scm like with four mbt domains | 1.397 | 2.48 |
| 399716 | LINC02656 | ATP synthase F1 subunit gamma | 1.692 | 3.485 |
| 57713 | SFMBT2 | TATA-box binding protein associated factor 3 | -3.53 | 17.862 |
| 509 | ATP5F1C | USP6 N-terminal like | -0.386 | 1.598 |
| 83860 | TAF3 | UPF2 regulator of nonsense mediated mRNA decay | -0.51 | 1.384 |
| 9712 | USP6NL | cell division cycle 123 | -0.67 | 1.745 |
| 26019 | UPF2 | calcium/calmodulin dependent protein kinase ID | 0.387 | 1.517 |
| 8872 | CDC123 | optineurin | 0.79 | 5.774 |
| 57118 | CAMK1D | minichromosome maintenance 10 replication initiation factor | -1.577 | 2.227 |
| 10133 | OPTN | BEN domain containing 7 | -2.296 | 4.1 |
| 55388 | MCM10 | pre-mRNA processing factor 18 | 3.132 | 2.205 |
| 222389 | BEND7 | FERM domain containing 4A | 2.635 | 11.466 |
| 8559 | PRPF18 | family with sequence similarity 107 member B | 0.643 | 4.815 |
| 55691 | FRMD4A | heat shock protein family A (Hsp70) member 14 | 0.818 | 3.616 |
| 83641 | FAM107B | oleoyl-ACP hydrolase | 2.059 | 6.529 |
| 51182 | HSPA14 | N-myristoyl transferase 2 | 0.652 | 1.42 |
| 55301 | OLAH | MINDY lysine 48 deubiquitinase 3 | 6.423 | 5.389 |
| 9397 | NMT2 | phosphotriesterase related | -2.003 | 3.011 |
| 80013 | MINDY3 | complement C1q like 3 | 0.78 | 2.493 |
| 9317 | PTER | PTER | -1.582 | 7.946 |
| 389941 | C1QL3 | complement C1q like 3 | -1.92 | 1.928 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 6251 | RSU1 | Ras suppressor protein 1 | 0.866 | 6.016 |
| 100507347 | VIM-AS1 | VIM antisense RNA 1 | 0.884 | 5.345 |
| 7431 | VIM | vimentin | 0.952 | 5.537 |
| 8027 | STAM | signal transducing adaptor molecule | 1.896 | 5.794 |
| 221078 | NSUN6 | NOP2/Sun RNA methyltransferase 6 | 0.777 | 2.265 |
| 84898 | PLXDC2 | plexin domain containing 2 | -1.827 | 5.977 |
| 10529 | NEBL | nebulette | 3.843 | 2.878 |
| 100499489 | LINC03027 | long intergenic non-protein coding RNA 3027 | -1.158 | 2.04 |
| 5305 | PIP4K2A | phosphatidylinositol-5-phosphate 4-kinase type 2 alpha | -0.541 | 2.379 |
| 22921 | MSRB2 | methionine sulfoxide reductase B2 | 0.685 | 2.454 |
| 220213 | OTUD1 | OTU deubiquitinase 1 | -0.873 | 1.62 |
| 57584 | ARHGAP21 | Rho GTPase activating protein 21 | -1.565 | 5.669 |
| 219670 | ENKUR | enkurn, TRPC channel interacting protein | -2.595 | 1.936 |
| 10006 | ABI1 | abi interactor 1 | 0.59 | 2.636 |
| 22852 | ANKRD26 | ankyrin repeat domain containing 26 | -1.515 | 7.265 |
| 22931 | RAB18 | RAB18, member RAS oncogene family | 1.632 | 7.922 |
| 105376463 | LINC02680 | long intergenic non-protein coding RNA 2680 | 1.832 | 2.946 |
| 220906 | WAC-AS1 | WAC antisense RNA 1 (head to head) | 0.906 | 2.363 |
| 25805 | BAMBI | BMP and activin membrane bound inhibitor | 2.285 | 3.892 |
| 102724316 | SVIL-AS1 | SVIL antisense RNA 1 | 0.99 | 6.671 |
| 6840 | SVIL | supervillin | 1.58 | 8.454 |
| 57608 | JCAD | junctional cadherin 5 associated | 3.306 | 2.983 |
| 220930 | ZEB1-AS1 | ZEB1 antisense RNA 1 | 2.848 | 5.544 |
| 6935 | ZEB1 | zinc finger E-box binding homeobox 1 | 2.516 | 5.796 |
| 100505502 | LOC100505502 | POM121 transmembrane nucleoporin like, pseudogene | 3.652 | 3.433 |
| 107984219 | LOC107984219 | uncharacterized LOC107984219 | 0.854 | 2.961 |
| 3799 | KIF5B | kinesin family member 5B | 0.962 | 4.059 |
| 80314 | EPC1 | enhancer of polycomb homolog 1 | 0.537 | 1.373 |
| 79741 | CCDC7 | coiled-coil domain containing 7 | 1.359 | 3.286 |
| 105376486 | LOC105376486 | integron subunit beta 1 | -1.514 | 2.063 |
| 3688 | ITGB1 | small nucleolar RNA, H/ACA box 86 | -1.175 | 8.547 |
| 106633814 | SNORA86 | neuropilin 1 | -0.055 | 1.785 |
| 8829 | NRP1 | cyclin Y | -2.122 | 2.649 |
| 219771 | CCNY | zinc finger protein 25 | -0.533 | 1.313 |
| 219749 | ZNF25 | zinc finger protein 33A | -0.42 | 1.337 |
| 7581 | ZNF33A | hydroxysteroid 17-beta dehydrogenase 7 pseudogene 2 | 0.956 | 3.647 |
| 158160 | HSD17B7P2 | zinc finger protein 37B, pseudogene | -1.602 | 1.652 |
| 100129482 | ZNF37BP | chondroitin sulfate N-acetylgalactosaminyltransferase 2 | 0.521 | 1.565 |
| 55454 | CSGALNACT2 | RasGEF domain family member 1A | 1.391 | 3.859 |
| 221002 | RASGEF1A | zinc finger protein 487 | 2.422 | 3.778 |
| 642819 | ZNF487 | zinc finger protein 485 | 1.032 | 3.939 |
| 220992 | ZNF485 | zinc finger protein 32 | -1.734 | 1.369 |
| 7580 | ZNF32 | ZNF32 antisense RNA 1 | -1.585 | 4.804 |
| 414197 | ZNF32-AS1 | ZNF32 antisense RNA 2 | -1.794 | 1.888 |
| 414208 | ZNF32-AS2 | Ras association domain family member 4 | -1.68 | 2.219 |
| 83937 | RASSF4 | uncharacterized LOC105378281 | -2.752 | 13.367 |
| 105378281 | LOC105378281 | DEPP1 | -2.89 | 8.594 |
| 11067 | DEPP1 | DEPP autophagy regulator 1 | -3.025 | 10.628 |
| 220979 | ZNF22-AS1 | ZNF22 antisense RNA 1 | -2.491 | 24.652 |
| 240 | ALOX5 | arachidonate 5-lipoxygenase | 1.187 | 8.685 |
| 102724323 | LOC102724323 | uncharacterized LOC102724323 | 1.567 | 4.98 |
| 105378286 | LOC105378286 | uncharacterized LOC105378286 | 2.543 | 3.766 |
| 105378577 | LOC105378577 | uncharacterized LOC105378577 | 5.074 | 4.701 |
| 195977 | ANTXRL | ANTXR like | 2.97 | 2.6 |
| 728113 | ANXA8L1 | annexin A8 like 1 | 8.984 | 2.446 |
| 83849 | SYT15 | synaptotagmin 15 | -3.505 | 6.416 |
| 414241 | SHLD2P1 | shieldin complex subunit 2 pseudogene 1 | -1.118 | 2.553 |
| 653145 | ANXA8 | annexin A8 | 7.4 | 4.831 |
| 102724488 | SYT15B | synaptotagmin 15B | -3.257 | 8.139 |
| 5599 | MAPK8 | mitogen-activated protein kinase 8 | -0.421 | 1.672 |
| 58504 | ARHGAP22 | Rho GTPase activating protein 22 | -3.312 | 15.103 |
| 170371 | TMEM273 | transmembrane protein 273 | 2.225 | 4.676 |
| 8505 | PARG | poly(ADP-ribose) glycohydrolase | -0.547 | 1.487 |
| 387680 | WASHC2A | WASH complex subunit 2A | -0.497 | 1.322 |
| 259230 | SGMS1 | sphingomyelin synthase 1 | -0.811 | 3.064 |
| 11130 | ZWINT | ZW10 interacting kinetochore protein | 2.99 | 3.439 |
| 8030 | CCDC6 | coiled-coil domain containing 6 | -1.256 | 3.712 |
| 983 | CDK1 | cyclin dependent kinase 1 | 3.316 | 1.709 |
| 9886 | RHOBTB1 | Rho related BTB domain containing 1 | -1.541 | 2.674 |
| 84159 | ARID5B | AT-rich interaction domain 5B | -1.521 | 2.149 |
| 84890 | ADO | 2-aminoethanethiol dioxygenase | -0.678 | 1.737 |
| 1959 | EGR2 | early growth response 2 | -2.739 | 2.494 |
| 29982 | NRBF2 | nuclear receptor binding factor 2 | 1.63 | 7.258 |
| 26091 | HERC4 | HECT and RLD domain containing E3 ubiquitin protein ligase 4 | 0.531 | 1.469 |
| 3189 | HNRNPH3 | heterogeneous nuclear ribonucleoprotein H3 | 0.472 | 1.86 |
| 55680 | RUFY2 | RUN and FYVE domain containing 2 | 0.426 | 1.426 |
| 1763 | DNA2 | DNA replication helicase/nuclease 2 | 1.907 | 2.697 |
| 79009 | DDX50 | DExD-box helicase 50 | -0.421 | 1.741 |
| 9188 | DDX21 | DExD-box helicase 21 | -0.826 | 2.789 |
| 26128 | KIFBP | kinesin family binding protein | 0.856 | 1.377 |
| 5552 | SRGN | serglycin | 1.236 | 2.205 |
| 3098 | HK1 | hexokinase 1 | -0.564 | 6.16 |
| 84883 | AIFM2 | apoptosis inducing factor mitochondria associated 2 | -1.364 | 2.412 |
| 219743 | TYSND1 | trypsin like peroxisomal matrix peptidase 1 | -1.768 | 8.147 |
| 56681 | SAR1A | secretion associated Ras related GTPase 1A | 0.509 | 1.343 |
| 5464 | PPA1 | inorganic pyrophosphatase 1 | -1.194 | 3.553 |
| 8879 | SGPL1 | sphingosine-1-phosphate lyase 1 | -1.451 | 4.826 |
| 55315 | SLC29A3 | solute carrier family 29 member 3 | -1.997 | 7.281 |
| 64072 | CDH23 | cadherin related 23 | -1.191 | 2.349 |
| 414152 | C10orf105 | chromosome 10 open reading frame 105 | -0.973 | 2.781 |
| 5660 | PSAP | prosaposin | -1.824 | 18.901 |
| 9806 | SPOCK2 | SPARC (osteonectin), cwcv and kazal like domains proteoglycan 2 | -2.774 | 2.501 |
| 90550 | MCU | mitochondrial calcium uniporter | 2.097 | 6.409 |
| 5033 | P4HA1 | prolyl 4-hydroxylase subunit alpha 1 | -0.575 | 2.471 |
| 317662 | FAM149B1 | family with sequence similarity 149 member B1 | 0.743 | 1.53 |
| 23234 | DNAJC9 | DnaJ heat shock protein family (Hsp40) member C9 | 1.983 | 3.865 |
| 310 | ANXA7 | annexin A7 | 0.347 | 1.52 |
| 118490 | MSS51 | MSS51 mitochondrial translational activator | 0.869 | 2.883 |
| 23053 | ZSWIM8 | zinc finger SWIM-type containing 8 | 0.761 | 4.455 |
| 100507331 | ZSWIM8-AS1 | ZSWIM8 antisense RNA 1 | 0.799 | 4.515 |
| 8509 | NDST2 | N-deacetylase and N-sulfotransferase 2 | 0.492 | 1.579 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|----------------|--|----------|----------|
| 818 | CAMK2G | calcium/calmodulin dependent protein kinase II gamma | 1.159 | 6.769 |
| 5328 | PLAU | plasminogen activator, urokinase | 3.055 | 5.051 |
| 414236 | C10orf55 | chromosome 10 putative open reading frame 55 | 3.002 | 5.169 |
| 51207 | DUSP13 | dual specificity phosphatase 13 | 4.826 | 8.292 |
| 84858 | ZNF503 | zinc finger protein 503 | -1.737 | 2.287 |
| 57178 | ZMZ1 | zinc finger MIZ-type containing 1 | -1.064 | 7.313 |
| 107984247 | LOC107984247 | | -0.828 | 3.578 |
| 143244 | EIF5AL1 | eukaryotic translation initiation factor 5A like 1 | -0.651 | 1.396 |
| 101060691 | NUTM2B-AS1 | NUTM2B antisense RNA 1 | 0.582 | 2.282 |
| 6441 | SFTP2D | surfactant protein D | -3.065 | 2.459 |
| 311 | ANXA11 | annexin A11 | 1.22 | 26.473 |
| 100130698 | LOC100130698 | uncharacterized LOC100130698 | 4.69 | 4.491 |
| 84293 | PRXL2A | peroxiredoxin like 2A | -3.009 | 4.095 |
| 81619 | TSPAN14 | tetraspanin 14 | -0.337 | 2.057 |
| 387694 | SH2D4B | SH2 domain containing 4B | 1.601 | 1.782 |
| 54462 | CCSER2 | coiled-coil serine rich protein 2 | -0.391 | 1.454 |
| 657 | BMPR1A | bone morphogenetic protein receptor type 1A | -1.682 | 1.954 |
| 79812 | MMRN2 | multimerin 2 | -3.038 | 3.623 |
| 2746 | GLUD1 | glutamate dehydrogenase 1 | -1.213 | 15.815 |
| 54537 | SHLD2 | shieldin complex subunit 2 | -0.792 | 2.924 |
| 728118 | NUTM2A | NUT family member 2A | -0.901 | 2.794 |
| 728190 | NUTM2A-AS1 | NUTM2A antisense RNA 1 | 0.492 | 1.797 |
| 728130 | NUTM2D | NUT family member 2D | -1.033 | 2.002 |
| 9562 | MINPP1 | multiple inositol-polyphosphate phosphatase 1 | -2.289 | 5.757 |
| 643418 | LIPN | lipase family member N | -1.6 | 3.913 |
| 57559 | STAMBPL1 | STAM binding protein like 1 | 1.476 | 2.335 |
| 100302740 | FAS-AS1 | FAS antisense RNA 1 | 1.817 | 2.67 |
| 3988 | LIPA | lipase A, lysosomal acid type | -1.636 | 1.54 |
| 3433 | IFIT2 | interferon induced protein with tetra-tricopeptide repeats 2 | -2.877 | 1.746 |
| 3437 | IFIT3 | interferon induced protein with tetra-tricopeptide repeats 3 | -3.216 | 1.729 |
| 101926887 | LOC101926887 | uncharacterized LOC101926887 | -2.805 | 1.368 |
| 3434 | IFIT1 | interferon induced protein with tetra-tricopeptide repeats 1 | -3.699 | 1.504 |
| 107984251 | LOC107984251 | uncharacterized LOC107984251 | -2.037 | 2.04 |
| 24138 | IFIT5 | interferon induced protein with tetra-tricopeptide repeats 5 | -2.345 | 2.836 |
| 9585 | KIF20B | kinesin family member 20B | 1.03 | 1.577 |
| 3363 | HTR7 | 5-hydroxytryptamine receptor 7 | -2.797 | 1.947 |
| 84333 | PCGF5 | polycomb group ring finger 5 | -0.706 | 3.143 |
| 3832 | KIF11 | kinesin family member 11 | 2.942 | 2.881 |
| 54536 | EXOC6 | exocyst complex component 6 | 1.345 | 5.458 |
| 26509 | MYOF | myoferlin | -2.455 | 7.823 |
| 55165 | CEP55 | centrosomal protein 55 | 2.954 | 2.23 |
| 338557 | FFAR4 | free fatty acid receptor 4 | -4.43 | 4.889 |
| 64318 | NOC3L | NOC3 like DNA replication regulator | -1.768 | 2.679 |
| 23232 | TBC1D12 | TBC1 domain family member 12 | -3.281 | 6.036 |
| 3070 | HELLS | helicase, lymphoid specific | 2.725 | 3.438 |
| 26123 | TCTN3 | tectonic family member 3 | -1.905 | 7.912 |
| 953 | ENTPD1 | ectonucleoside triphosphate diphosphohydrolase 1 | 1.245 | 12.53 |
| 728558 | ENTPD1-AS1 | ENTPD1 antisense RNA 1 | 1.118 | 7.459 |
| 54619 | CCNJ | cyclin J | -0.874 | 3.007 |
| 29760 | BLNK | B cell linker | -3.469 | 11.2 |
| 56889 | TM9SF3 | transmembrane 9 superfamily member 3 | -0.474 | 2.002 |
| 118788 | PIK3AP1 | phosphoinositide-3-kinase adaptor protein 1 | -0.593 | 1.801 |
| 728658 | RPL13AP5 | ribosomal protein L13a pseudogene 5 | -0.749 | 2.306 |
| 102723665 | LOC102723665 | uncharacterized LOC102723665 | 0.907 | 1.423 |
| 100533184 | ARHGAP19-SLIT1 | ARHGAP19-SLIT1 readthrough (NMD candidate) | 1.143 | 5.092 |
| 84986 | ARHGAP19 | Rho GTPase activating protein 19 | 1.33 | 10.28 |
| 10023 | FRAT1 | FRAT regulator of WNT signaling pathway 1 | 1.1 | 4.429 |
| 23401 | FRAT2 | FRAT regulator of WNT signaling pathway 2 | 1.428 | 8.851 |
| 23223 | RRP12 | ribosomal RNA processing 12 homolog | 0.875 | 1.351 |
| 644215 | LOC644215 | uncharacterized LOC644215 | 1.775 | 3.097 |
| 5223 | PGAM1 | phosphoglycerate mutase 1 | 0.493 | 1.591 |
| 80019 | UBTD1 | ubiquitin domain containing 1 | 1.416 | 10.767 |
| 60370 | AVP1 | arginine vasopressin induced 1 | -1.873 | 2.131 |
| 83742 | MARVELD1 | MARVEL domain containing 1 | -0.955 | 1.971 |
| 57089 | ENTPD7 | ectonucleoside triphosphate diphosphohydrolase 7 | 1.76 | 6.129 |
| 51076 | CUTC | cuIC copper transporter | 0.858 | 4.566 |
| 23268 | DNMBP | dynamin binding protein | 0.953 | 2.56 |
| 10613 | ERLIN1 | ER lipid raft associated 1 | 1.648 | 3.351 |
| 1147 | CHUK | component of inhibitor of nuclear factor kappa B kinase complex | 0.589 | 1.723 |
| 55280 | CWF19L1 | CWF19 like cell cycle control factor 1 | 0.521 | 2.923 |
| 282991 | BLOC1S2 | biogenesis of lysosomal organelles complex 1 subunit 2 | 0.515 | 1.44 |
| 6319 | SCD | stearoyl-CoA desaturase | 2.116 | 1.553 |
| 25956 | SEC31B | SEC31 homolog B, COPII coat complex component | 0.722 | 1.915 |
| 55662 | HIF1AN | hypoxia inducible factor 1 subunit alpha inhibitor | 0.6 | 2.881 |
| 84545 | MRPL43 | mitochondrial ribosomal protein L43 | -0.537 | 2.698 |
| 56652 | TWNK | twinkle mtDNA helicase | -1.811 | 3.025 |
| 81855 | SFXN3 | sideroflexin 3 | -2.08 | 6.326 |
| 81621 | KAZALD1 | Kazal type serine peptidase inhibitor domain 1 | -2.737 | 2.145 |
| 27343 | POLL | DNA polymerase lambda | -0.873 | 4.106 |
| 25911 | DPCD | deleted in primary ciliary dyskinesia homolog (mouse) | -2.002 | 5.83 |
| 10360 | NPM3 | nucleophosmin/nucleoplasmin 3 | -0.844 | 1.632 |
| 10724 | OGA | O-GlcNAcase | 0.641 | 3.462 |
| 8861 | LDB1 | LIM domain binding 1 | 0.398 | 2.107 |
| 9221 | NOLC1 | nucleolar and coiled-body phosphoprotein 1 | -0.839 | 4.495 |
| 79847 | MFSD13A | major facilitator superfamily domain containing 13A | 0.837 | 2.749 |
| 10121 | ACTR1A | actin related protein 1A | 0.336 | 1.325 |
| 51684 | SUFU | SUFU negative regulator of hedgehog signaling | -1.619 | 15.481 |
| 81603 | TRIM8 | tripartite motif containing 8 | -0.924 | 3.113 |
| 403 | ARL3 | ADP ribosylation factor like GTPase 3 | -0.964 | 1.815 |
| 54838 | WBP1L | WW domain binding protein 1 like | -0.669 | 2.294 |
| 100528007 | BORCS7-ASMT | BORCS7-ASMT readthrough (NMD candidate) | -1.347 | 6.608 |
| 119032 | BORCS7 | BLOC-1 related complex subunit 7 | -1.246 | 5.55 |
| 54805 | CNNM2 | cyclin and CBS domain divalent metal cation transport mediator 2 | 0.659 | 2.165 |
| 22978 | NT5C2 | 5'-nucleotidase, cytosolic II | 0.72 | 1.996 |
| 22984 | PCD11 | programmed cell death 11 | -0.938 | 5.264 |
| 51063 | CALHM2 | calcium homeostasis modulator family member 2 | -2.699 | 5.982 |
| 9148 | NEURL1 | neuralized E3 ubiquitin protein ligase 1 | -3.539 | 5.458 |
| 9644 | SH3PXD2A | SH3 and PX domains 2A | -2.111 | 7.299 |
| 9748 | SLK | STE20 like kinase | 0.774 | 2.303 |
| 1308 | COL17A1 | collagen type XVII alpha 1 chain | 3.361 | 1.803 |
| 119391 | GSTO2 | glutathione S-transferase omega 2 | 1.439 | 5.186 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 85450 | ITPRIP | inositol 1,4,5-trisphosphate receptor interacting protein | 1.698 | 6.168 |
| 101927472 | ITPRIP-AS1 | ITPRIP antisense RNA 1 | 2.647 | 8.769 |
| 159686 | CFAP58 | cilia and flagella associated protein 58 | 1.578 | 2.258 |
| 100505869 | CFAP58-DT | CFAP58 divergent transcript | 1.872 | 1.408 |
| 7511 | XPNPEP1 | X-prolyl aminopeptidase 1 | -0.501 | 1.953 |
| 100505933 | ADD3-AS1 | ADD3 antisense RNA 1 | 0.984 | 3.279 |
| 120 | ADD3 | adducin 3 | 0.842 | 6.539 |
| 4601 | MX11 | MAX interactor 1, dimerization protein | 0.511 | 1.39 |
| 10285 | SMNDC1 | survival motor neuron domain containing 1 | 0.456 | 1.492 |
| 1847 | DUSP5 | dual specificity phosphatase 5 | -2.667 | 6.734 |
| 9126 | SMC3 | structural maintenance of chromosomes 3 | 1.187 | 3.302 |
| 51703 | ACSL5 | acyl-CoA synthetase long chain family member 5 | -0.711 | 1.622 |
| 105378487 | LOC105378487 | | -3.307 | 2.807 |
| 112268058 | LOC112268058 | | -0.921 | 1.93 |
| 103344931 | LOC103344931 | uncharacterized LOC103344931 | -0.884 | 2.583 |
| 6934 | TCF7L2 | transcription factor 7 like 2 | -2.056 | 9.176 |
| 840 | CASP7 | caspase 7 | -1.917 | 5.068 |
| 9937 | DCLRE1A | DNA cross-link repair 1A | 1.655 | 2.448 |
| 374354 | NHLRC2 | NHL repeat containing 2 | 1.06 | 2.98 |
| 153 | ADRB1 | adrenoceptor beta 1 | -4.283 | 3.811 |
| 55088 | CCDC186 | coiled-coil domain containing 186 | 1.344 | 4.869 |
| 3983 | ABLIM1 | actin binding LIM protein 1 | -2.167 | 2.529 |
| 57700 | FHIP2A | FHF complex subunit HOOK interacting protein 2A | 1.577 | 11.236 |
| 387712 | ENO4 | enolase 4 | -2.035 | 7.945 |
| 57698 | SHTN1 | shootin 1 | -2.17 | 11.56 |
| 6571 | SLC18A2 | solute carrier family 18 member A2 | 2.073 | 15.231 |
| 118987 | PDZD8 | PDZ domain containing 8 | 2.471 | 9.514 |
| 22841 | RAB11FIP2 | RAB11 family interacting protein 2 | 1.21 | 4.497 |
| 8661 | EIF3A | eukaryotic translation initiation factor 3 subunit A | -0.617 | 2.336 |
| 6001 | RGS10 | regulator of G protein signaling 10 | -2.237 | 15.104 |
| 9531 | BAG3 | BAG co-chaperone 3 | -1.929 | 3.214 |
| 22876 | INPP5F | inositol polyphosphate-5-phosphatase F | -0.818 | 2.432 |
| 11196 | SEC23IP | SEC23 interacting protein | -0.389 | 1.408 |
| 55717 | WDR11 | WD repeat domain 11 | -0.927 | 4.272 |
| 105378519 | LOC105378519 | uncharacterized LOC105378519 | -1.009 | 1.459 |
| 11101 | ATE1 | arginyltransferase 1 | 0.762 | 2.527 |
| 59338 | PLEKHA1 | pleckstrin homology domain containing A1 | -2.325 | 7.9 |
| 196792 | FAM24B | family with sequence similarity 24 member B | -1.696 | 2.068 |
| 9184 | BUB3 | BUB3 mitotic checkpoint protein | 0.648 | 1.331 |
| 51363 | CHST15 | carbohydrate sulfotransferase 15 | -1.44 | 2.461 |
| 64077 | LHPP | phospholysine phosphohistidine inorganic pyrophosphate phosphatase | -1.721 | 5.624 |
| 105378539 | LOC105378539 | family with sequence similarity 53 member B | -0.879 | 3.164 |
| 9679 | FAM53B | zinc finger RANBP2-type containing 1 | -0.848 | 4.128 |
| 54764 | ZRANB1 | marker of proliferation Ki-67 | 0.914 | 4.704 |
| 4288 | MKI67 | chromosome 10 open reading frame 143 | 3.505 | 1.997 |
| 387723 | C11orf143 | dihydropyrimidinase like 4 | -1.181 | 1.633 |
| 10570 | DPSL4 | leucine rich repeat containing 27 | -2.265 | 2.417 |
| 80313 | LRRC27 | PWWP domain containing 2B | -1.802 | 6.969 |
| 170394 | PWWP2B | inositol polyphosphate-5-phosphatase A | -1.092 | 3.546 |
| 3632 | INPP5A | NK6 homeobox 2 | 0.851 | 2.512 |
| 84504 | NKX6-2 | kinase non-catalytic C-lobe domain containing 1 | 1.124 | 3.359 |
| 85442 | KNDC1 | VENT homeobox | -5.776 | 26.473 |
| 27287 | VENTX | tubulin gamma complex associated protein 2 | -1.57 | 3.585 |
| 10844 | TUBGCP2 | zinc finger protein 511 | -0.657 | 2.562 |
| 118472 | ZNF511 | proline rich acidic protein 1 | -0.995 | 3.513 |
| 118471 | PRAP1 | fucose mutarotase | -3.666 | 3.092 |
| 282969 | FUOM | enoyl-CoA hydratase, short chain 1 | -2.426 | 6.784 |
| 1892 | ECHS1 | polyamine oxidase | -0.649 | 2.219 |
| 196743 | PAOX | mitochondrial ribosome associated GTPase 1 | -3.84 | 11.753 |
| 92170 | MTG1 | scavenger receptor family member expressed on T cells 1 | -0.588 | 1.596 |
| 619207 | SCART1 | long intergenic non-protein coding RNA 1001 | -1.759 | 2.428 |
| 100133161 | LINC01001 | uncharacterized LOC112268070 | 1.48 | 6.602 |
| 112268070 | LOC112268070 | replaced by ID 112268070 | 1.053 | 2.718 |
| 388572 | LOC388572 | uncharacterized LOC101930129 | 1.399 | 6.333 |
| 101930129 | LOC101930129 | Bet1 golgi vesicular membrane trafficking protein like | 1.177 | 1.381 |
| 51272 | BET1L | interferon induced transmembrane protein 3 | -0.404 | 1.377 |
| 10410 | IFITM3 | single Ig and TIR domain containing | -2.551 | 2.618 |
| 59307 | SIGIRR | anoctamin 9 | -0.91 | 3.733 |
| 338440 | ANO9 | ribonuclease/angiogenin inhibitor 1 | -1.552 | 3.898 |
| 6050 | RNH1 | interferon regulatory factor 7 | -0.904 | 4.588 |
| 3665 | IRF7 | DEAF1 transcription factor | -1.92 | 2.772 |
| 10522 | DEAF1 | EPS8 like 2 | -0.86 | 6.117 |
| 64787 | EPS8L2 | transaldolase 1 | 2.397 | 4.081 |
| 6888 | TALDO1 | p53-induced death domain protein 1 | 1.316 | 15.367 |
| 55367 | PIDD1 | patatin like phospholipase domain containing 2 | 0.788 | 3.305 |
| 57104 | PNPLA2 | calcium release activated channel regulator 2B | 1.155 | 8.282 |
| 283229 | CRACR2B | tetraspanin 4 | 2.678 | 6.062 |
| 7106 | TSPAN4 | long intergenic non-protein coding RNA 2688 | -2.32 | 9.48 |
| 101927503 | LINC02688 | toll interacting protein | 4.311 | 6.618 |
| 54472 | TOLLIP | cathepsin D | 0.413 | 1.632 |
| 1509 | CTSD | uncharacterized LOC105376517 | 0.846 | 3.022 |
| 105376517 | LOC105376517 | long intergenic non-protein coding RNA 1150 | 2.767 | 16.798 |
| 101927624 | LINC01150 | achaeete-scute family bHLH transcription factor 2 | -2.904 | 3.878 |
| 430 | ASCL2 | chromosome 11 open reading frame 21 | -2.035 | 5.821 |
| 29125 | C11orf21 | tetraspanin 32 | 1.119 | 7.497 |
| 10077 | TSPAN32 | CD81 antisense RNA 1 | 0.867 | 4.056 |
| 101927682 | CD81-AS1 | CD81 molecule | -1.214 | 2.379 |
| 975 | CD81 | tumor suppressing subtransferable candidate 4 | -2.391 | 7.922 |
| 10078 | TSSC4 | potassium voltage-gated channel subfamily Q member 1 | 0.927 | 3.995 |
| 3784 | KCNQ1 | cyclin dependent kinase inhibitor 1C | -1.461 | 4.061 |
| 1028 | CDKN1C | SLC22A18 antisense RNA | -3.401 | 13.985 |
| 5003 | SLC22A18AS | solute carrier family 22 member 18 | -0.802 | 1.449 |
| 5002 | SLC22A18 | transient receptor potential cation channel subfamily C member 2 (pseudogene) | -0.82 | 1.533 |
| 7221 | TRPC2 | post-GPI attachment to proteins 2 | 1.757 | 1.948 |
| 27315 | PGAP2 | ras homolog family member G | 0.492 | 1.447 |
| 391 | RHOG | stromal interaction molecule 1 | 0.467 | 1.645 |
| 6786 | STIM1 | microRNA 4687 | 0.456 | 2.351 |
| 100616453 | MIR4687 | ribonucleotide reductase catalytic subunit M1 | 0.77 | 1.642 |
| 6240 | RRM1 | tripartite motif containing 5 | 1.702 | 2.644 |
| 85363 | TRIM5 | TRIM6-TRIM34 readthrough | -1.428 | 3.953 |
| 445372 | TRIM6-TRIM34 | | -1.935 | 6.629 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 53840 | TRIM34 | tripartite motif containing 34 | -2.059 | 7.543 |
| 10346 | TRIM22 | tripartite motif containing 22 | -1.927 | 2.518 |
| 160298 | C11orf42 | chromosome 11 open reading frame 42 | 1.394 | 1.877 |
| 84067 | FHIP1B | FHF complex subunit HOOK interacting protein 1B | 1.549 | 12.321 |
| 1262 | CNGA4 | cyclic nucleotide gated channel subunit alpha 4 | 2.742 | 7.694 |
| 322 | APBB1 | amyloid beta precursor protein binding family B member 1 | -2.459 | 3.978 |
| 10612 | TRIM3 | tripartite motif containing 3 | -1.105 | 5.28 |
| 144132 | DNHD1 | dynein heavy chain domain 1 | -0.988 | 3.165 |
| 8642 | DCHS1 | dachsous cadherin-related 1 | -2.137 | 3.626 |
| 63875 | MRPL17 | mitochondrial ribosomal protein L17 | -0.986 | 3.285 |
| 100506258 | SYT9-AS1 | SYT9 antisense RNA 1 | -1.648 | 1.621 |
| 8495 | PPFIBP2 | PPFIA binding protein 2 | -1.924 | 7.872 |
| 79608 | RIC3 | RIC3 acetylcholine receptor chaperone | -3.586 | 4.566 |
| 6157 | RPL27A | ribosomal protein L27a | -0.578 | 1.957 |
| 6764 | DENND2B | DENN domain containing 2B | 2.534 | 4.365 |
| 57758 | SCUBE2 | signal peptide, CUB domain and EGF like domain containing 2 | -3.306 | 3.468 |
| 440026 | TMEM41B | transmembrane protein 41B | 0.68 | 2.086 |
| 10527 | IPO7 | importin 7 | -1.103 | 3.693 |
| 7465 | WEE1 | WEE1 G2 checkpoint kinase | 2.987 | 3.429 |
| 23075 | SWAP70 | switching B cell complex subunit SWAP70 | -1.018 | 4.536 |
| 81846 | SBF2 | SET binding factor 2 | -1.431 | 3.828 |
| 105369149 | LOC105369149 | uncharacterized LOC105369149 | -1.592 | 2.909 |
| 272 | AMPD3 | adenosine monophosphate deaminase 3 | 2.046 | 4.386 |
| 55031 | USP47 | ubiquitin specific peptidase 47 | 0.487 | 1.468 |
| 9645 | MICAL2 | microtubule associated monooxygenase, calponin and LIM domain containing 2 | -1.211 | 1.714 |
| 84953 | MICALCL | replaced by ID 9645 | -1.694 | 2.938 |
| 84280 | BTBD10 | BTB domain containing 10 | 0.958 | 5.114 |
| 84188 | FAR1 | fatty acyl-CoA reductase 1 | 0.456 | 1.498 |
| 1315 | COPB1 | COP1 coat complex subunit beta 1 | 0.37 | 1.393 |
| 6207 | RPS13 | ribosomal protein S13 | -0.719 | 1.812 |
| 5286 | PIK3C2A | phosphatidylinositol-4-phosphate 3-kinase catalytic subunit type 2 alpha | -1.049 | 7.024 |
| 4925 | NUCB2 | nucleobindin 2 | 2.236 | 2.887 |
| 26297 | SERGEF | secretion regulating guanine nucleotide exchange factor | -0.73 | 1.842 |
| 11234 | HPS5 | HPS5 biogenesis of lysosomal organelles complex 2 subunit 2 | -0.549 | 1.855 |
| 3939 | LDHA | lactate dehydrogenase A | 1.881 | 6.578 |
| 100506540 | MISFA | mitochondrial sheath formation associated | 1.236 | 2.342 |
| 144108 | SPTY2D1 | SPT2 chromatin protein domain containing 1 | 1.243 | 2.595 |
| 144110 | TMEM86A | transmembrane protein 86A | -3.724 | 7.846 |
| 54503 | ZDHC13 | zinc finger DHHC-type palmitoyltransferase 13 | 1.841 | 5.383 |
| 105376580 | CSR3-AS1 | CSR3 and E2F8 antisense RNA 1 | 3.02 | 1.753 |
| 79733 | E2F8 | E2F transcription factor 8 | 3.943 | 1.453 |
| 89797 | NAV2 | neuron navigator 2 | 3.492 | 4.031 |
| 100874014 | NAV2-AS2 | NAV2 antisense RNA 2 | 3.743 | 3.02 |
| 10196 | PRMT3 | protein arginine methyltransferase 3 | -0.656 | 2.479 |
| 203859 | ANO5 | anoctamin 5 | -2.445 | 2.753 |
| 258010 | SVIP | small VCP interacting protein | 3.04 | 5.207 |
| 91057 | CCDC34 | coiled-coil domain containing 34 | 1.336 | 1.408 |
| 81930 | KIF18A | kinesin family member 18A | 2.115 | 2.44 |
| 120534 | ARL14EP | ADP ribosylation factor like GTPase 14 effector protein | -1.839 | 8.305 |
| 196294 | IMMP1L | inner mitochondrial membrane peptidase subunit 1 | 1.999 | 4.704 |
| 5954 | RCN1 | reticulocalbin 1 | -2.359 | 8.673 |
| 10480 | EIF3M | eukaryotic translation initiation factor 3 subunit M | -0.676 | 2.219 |
| 79832 | QSER1 | glutamine and serine rich 1 | -1.153 | 4.981 |
| 338739 | CSTF3-DT | CSTF3 divergent transcript | 2.224 | 1.485 |
| 100131378 | C11orf91 | chromosome 11 open reading frame 91 | 2.575 | 3.449 |
| 966 | CD59 | CD59 molecule (CD59 blood group) | 2.783 | 4.315 |
| 26273 | FBXO3 | F-box protein 3 | 0.77 | 2.845 |
| 4005 | LMO2 | LIM domain only 2 | -0.672 | 2.711 |
| 55226 | NAT10 | N-acetyltransferase 10 | -0.828 | 4.098 |
| 847 | CAT | catalase | 0.833 | 3.478 |
| 960 | CD44 | CD44 molecule (Indian blood group) | -1.044 | 1.72 |
| 6506 | SLC1A2 | solute carrier family 1 member 2 | -1.668 | 1.441 |
| 54765 | TRIM44 | tripartite motif containing 44 | -1.822 | 34.449 |
| 143458 | LDLRAD3 | low density lipoprotein receptor class A domain containing 3 | -2.158 | 5.147 |
| 79899 | PRR5L | proline rich 5 like | -1.78 | 4.147 |
| 7189 | TRAF6 | TNF receptor associated factor 6 | 0.676 | 1.434 |
| 51144 | HSD17B12 | hydroxysteroid 17-beta dehydrogenase 12 | 1.212 | 2.33 |
| 107984328 | LOC107984328 | uncharacterized LOC107984328 | 1.574 | 2.991 |
| 221120 | ALKBH3 | alkB homolog 3, alpha-ketoglutarate dependent dioxygenase | -0.944 | 2.34 |
| 729799 | SEC14L1P1 | SEC14 like 1 pseudogene 1 | -1.284 | 2.22 |
| 84680 | ACCS | 1-amino cyclopropane-1-carboxylate synthase homolog (inactive) | -2.055 | 4.563 |
| 2132 | EXT2 | exostosin glycosyltransferase 2 | -1.102 | 7.613 |
| 3732 | CD82 | CD82 molecule | 1.67 | 9.65 |
| 9537 | TP53I11 | tumor protein p53 inducible protein 11 | 2.27 | 10.313 |
| 8534 | CHST1 | carbohydrate sulfotransferase 1 | 1.925 | 1.303 |
| 55343 | SLC35C1 | solute carrier family 35 member C1 | -0.8 | 3.606 |
| 8525 | DGKZ | diacylglycerol kinase zeta | 0.812 | 7.856 |
| 4192 | MDK | midkine | 2.044 | 7.008 |
| 79797 | ZNF408 | zinc finger protein 408 | 0.618 | 1.565 |
| 53 | ACP2 | acid phosphatase 2, lysosomal | -1.274 | 3.693 |
| 10062 | NR1H3 | nuclear receptor subfamily 1 group H member 3 | -2.103 | 5.252 |
| 8567 | MADD | MAP kinase activating death domain | -0.831 | 5.245 |
| 23360 | FNBP4 | formin binding protein 4 | -0.507 | 1.615 |
| 85456 | TNKS1BP1 | tankyrase 1 binding protein 1 | -1.376 | 2.358 |
| 8501 | SLC43A1 | solute carrier family 43 member 1 | 1.251 | 1.86 |
| 219537 | SMTNL1 | smoothelin like 1 | -2.014 | 2.07 |
| 9246 | UBE2L6 | ubiquitin conjugating enzyme E2 L6 | -1.948 | 3.929 |
| 710 | SERPING1 | serpin family G member 1 | -4.523 | 3.869 |
| 100528016 | TMX2-CTNNND1 | TMX2-CTNNND1 readthrough (NMD candidate) | -1.937 | 15.963 |
| 51075 | TMX2 | thioredoxin related transmembrane protein 2 | -0.58 | 1.521 |
| 280636 | SELENOH | seleoprotein H | -0.645 | 3.065 |
| 1500 | CTNND1 | catenin delta 1 | -2.204 | 15.509 |
| 105369313 | LOC105369313 | uncharacterized LOC105369313 | -2.949 | 3.176 |
| 9404 | LPXN | leupaxin | -1.982 | 17.975 |
| 23220 | DTX4 | deltex E3 ubiquitin ligase 4 | -0.876 | 1.701 |
| 219972 | MPEG1 | macrophage expressed 1 | -2.749 | 10.859 |
| 6809 | STX3 | syntaxin 3 | 1.876 | 12.689 |
| 6947 | TCN1 | transcobalamin 1 | 3.408 | 1.636 |
| 105369319 | LINC02705 | long intergenic non-protein coding RNA 2705 | -2.083 | 3.035 |
| 64231 | MS4A6A | membrane spanning 4-domains A6A | -1.559 | 7.111 |
| 643680 | MS4A4E | membrane spanning 4-domains A4E | -2.109 | 13.88 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 102465250 | MIR6503 | microRNA 6503 | -2.904 | 1.893 |
| 58475 | MS4A7 | membrane spanning 4-domains A7 | -1.913 | 7.331 |
| 84689 | MS4A14 | membrane spanning 4-domains A14 | -1.683 | 3.02 |
| 931 | MS4A1 | membrane spanning 4-domains A1 | -5.517 | 17.858 |
| 79080 | CCDC86 | coiled-coil domain containing 86 | -1.597 | 8.018 |
| 11251 | PTGDR2 | prostaglandin D2 receptor 2 | -3.437 | 8.376 |
| 27339 | PRPF19 | pre-mRNA processing factor 19 | -0.69 | 2.117 |
| 79073 | TMEM109 | transmembrane protein 109 | -1.34 | 10.053 |
| 51296 | SLC15A3 | solute carrier family 15 member 3 | -1.078 | 1.821 |
| 923 | CD6 | CD6 molecule | -3.288 | 1.446 |
| 105369325 | LOC105369325 | uncharacterized LOC105369325 | -3.248 | 2.731 |
| 921 | CD5 | CD5 molecule | -2.471 | 3.102 |
| 220002 | CYB561A3 | cytochrome b561 family member A3 | -0.693 | 1.899 |
| 51259 | TMEM216 | transmembrane protein 216 | 1.734 | 6.723 |
| 54949 | SDHAF2 | succinate dehydrogenase complex assembly factor 2 | 0.605 | 3.558 |
| 747 | DAGLA | diacylglycerol lipase alpha | -3.502 | 7.89 |
| 2237 | FEN1 | flap structure-specific endonuclease 1 | 1.477 | 2.15 |
| 3995 | FADS3 | fatty acid desaturase 3 | -1.329 | 1.71 |
| 5866 | RAB3IL1 | RAB3A interacting protein like 1 | 3.07 | 2.544 |
| 7439 | BEST1 | bestrophin 1 | -1.434 | 2.269 |
| 2495 | FTH1 | ferritin heavy chain 1 | -1.473 | 2.328 |
| 399900 | LOC399900 | uncharacterized LOC399900 | -1.896 | 1.656 |
| 3619 | INCENP | inner centromere protein | 1.513 | 5.88 |
| 79026 | AHNAK | AHNAK nucleoprotein | -2.106 | 4.257 |
| 692158 | SNORA57 | small nucleolar RNA, H/ACA box 57 | 2.33 | 1.441 |
| 790955 | UQCC3 | ubiquinol-cytochrome c reductase complex assembly factor 3 | 0.587 | 1.842 |
| 5436 | POLR2G | RNA polymerase II subunit G | 0.441 | 1.343 |
| 374395 | TMEM179B | transmembrane protein 179B | -0.581 | 2.912 |
| 105369332 | STX5-DT | STX5 divergent transcript | -0.887 | 1.496 |
| 54663 | WDR74 | WD repeat domain 74 | -1.102 | 2.427 |
| 23642 | SNHG1 | small nucleolar RNA host gene 1 | 1.285 | 2.413 |
| 9304 | SNORD22 | small nucleolar RNA, C/D box 22 | 1.95 | 3.714 |
| 9298 | SNORD31 | small nucleolar RNA, C/D box 31 | 2.006 | 4.211 |
| 9299 | SNORD30 | small nucleolar RNA, C/D box 30 | 2.685 | 3.959 |
| 9297 | SNORD29 | small nucleolar RNA, C/D box 29 | 2.075 | 3.025 |
| 9300 | SNORD28 | small nucleolar RNA, C/D box 28 | 2.177 | 2.819 |
| 9301 | SNORD27 | small nucleolar RNA, C/D box 27 | 2.48 | 3.518 |
| 9302 | SNORD26 | small nucleolar RNA, C/D box 26 | 2.216 | 3.362 |
| 9303 | SNORD25 | small nucleolar RNA, C/D box 25 | 1.513 | 2.444 |
| 85329 | LGALS12 | galectin 12 | 1.853 | 4.727 |
| 5920 | PLAAT4 | phospholipase A and acyltransferase 4 | -3.29 | 8.219 |
| 11145 | PLAAT3 | phospholipase A and acyltransferase 3 | -1.787 | 3.724 |
| 10313 | RTN3 | reticulon 3 | 1.254 | 6.786 |
| 65998 | ZFTA | zinc finger translocation associated | -2.213 | 5.097 |
| 144097 | SPINDOC | spindlin interactor and repressor of chromatin binding | -0.907 | 1.893 |
| 79829 | NAA40 | N-alpha-acetyltransferase 40, NatD catalytic subunit | 0.7 | 2.887 |
| 10963 | STIP1 | stress induced phosphoprotein 1 | -0.474 | 2.299 |
| 114841035 | LOC114841035 | Uncharacterized protein LOC114841035 | -0.488 | 1.403 |
| 26472 | PPP1R14B | protein phosphatase 1 regulatory inhibitor subunit 14B | -0.666 | 1.999 |
| 5331 | PLCB3 | phospholipase C beta 3 | -0.679 | 1.933 |
| 25824 | PRDX5 | peroxiredoxin 5 | 1.393 | 5.33 |
| 102723878 | LOC102723878 | uncharacterized LOC102723878 | 1.155 | 6.931 |
| 283234 | CCDC88B | coiled-coil domain containing 88B | 1.075 | 9.865 |
| 8986 | RPS6KA4 | ribosomal protein S6 kinase A4 | -2.016 | 14.085 |
| 107984366 | LINC02723 | long intergenic non-protein coding RNA 2723 | -4.074 | 9.066 |
| 100996455 | LINC02724 | long intergenic non-protein coding RNA 2724 | -2.564 | 7.318 |
| 9379 | NRXN2 | neurexin 2 | -5.864 | 4.224 |
| 10235 | RASGRP2 | RAS guanyl releasing protein 2 | 0.743 | 7.587 |
| 5837 | PYGM | glycogen phosphorylase, muscle associated | 1.125 | 1.489 |
| 7536 | SF1 | splicing factor 1 | 0.575 | 1.861 |
| 5871 | MAP4K2 | mitogen-activated protein kinase kinase kinase kinase 2 | 0.379 | 1.417 |
| 55561 | CDC42BPG | CDC42 binding protein kinase gamma | 1.426 | 1.588 |
| 10938 | EHD1 | EH domain containing 1 | 1.304 | 4.861 |
| 113218486 | MIR10392 | microRNA 10392 | 1.372 | 2.389 |
| 23130 | ATG2A | autophagy related 2A | 0.993 | 1.659 |
| 102466192 | MIR6750 | microRNA 6750 | 1.641 | 1.912 |
| 113130 | CDC45 | cell division cycle associated 5 | 3.503 | 3.794 |
| 7542 | ZFPL1 | zinc finger protein like 1 | 0.555 | 2.575 |
| 7108 | TM7SF2 | transmembrane 7 superfamily member 2 | 1.004 | 3.132 |
| 823 | CAPN1 | calpain 1 | 0.733 | 5.057 |
| 23649 | POLA2 | DNA polymerase alpha 2, accessory subunit | 0.905 | 2.935 |
| 10435 | CDC42EP2 | CDC42 effector protein 2 | -1.667 | 3.087 |
| 5977 | DPF2 | double PHD fingers 2 | 0.502 | 3.003 |
| 283130 | SLC25A45 | solute carrier family 25 member 45 | 0.542 | 1.545 |
| 4054 | LTBP3 | latent transforming growth factor beta binding protein 3 | -2.045 | 4.279 |
| 254102 | EHBP1L1 | EH domain binding protein 1 like 1 | -0.629 | 1.856 |
| 10089 | KCNK7 | potassium two pore domain channel subfamily K member 7 | 0.988 | 1.994 |
| 4296 | MAP3K11 | mitogen-activated protein kinase kinase kinase kinase 11 | -0.586 | 1.474 |
| 10524 | KAT5 | lysine acetyltransferase 5 | 0.598 | 2.103 |
| 84153 | RNASEH2C | ribonuclease H2 subunit C | 0.841 | 2.392 |
| 91056 | AP5B1 | adaptor related protein complex 5 subunit beta 1 | 0.813 | 1.858 |
| 254122 | SNX32 | sorting nexin 32 | 0.851 | 3.744 |
| 1072 | CFL1 | cofilin 1 | 0.749 | 3.959 |
| 80198 | MUS81 | MUS81 structure-specific endonuclease subunit | 0.78 | 3.258 |
| 11007 | CCDC85B | coiled-coil domain containing 85B | 0.734 | 1.509 |
| 8061 | FOSL1 | FOS like 1, AP-1 transcription factor subunit | 1.436 | 1.306 |
| 10589 | DRAP1 | DR1 associated protein 1 | -1.182 | 3.845 |
| 254187 | TSGA10IP | testis specific 10 interacting protein | -2.297 | 1.909 |
| 84285 | EIF1AD | eukaryotic translation initiation factor 1A domain containing | 0.732 | 2.205 |
| 117144 | CATSPER1 | cation channel sperm associated 1 | -1.776 | 3.426 |
| 81876 | RAB1B | RAB1B, member RAS oncogene family | 0.457 | 2.478 |
| 107984340 | LOC107984340 | uncharacterized LOC107984340 | 0.451 | 2.363 |
| 254263 | CNIH2 | cornichon family AMPA receptor auxiliary protein 2 | 1.24 | 1.433 |
| 10897 | YIF1A | Yip1 interacting factor homolog A, membrane trafficking protein | -1.07 | 4.856 |
| 9610 | RIN1 | Ras and Rab interactor 1 | -2.33 | 7.821 |
| 11041 | B4GAT1 | beta-1,4-glucuronidyltransferase 1 | -1.395 | 1.316 |
| 3177 | SLC29A2 | solute carrier family 29 member 2 | -2.522 | 2.924 |
| 246330 | PEL13 | pellino E3 ubiquitin protein ligase family member 3 | -1.706 | 3.126 |
| 101928069 | DPP3-DT | DPP3 divergent transcript | -0.986 | 1.847 |
| 582 | BBS1 | Bardet-Biedl syndrome 1 | -0.667 | 1.543 |
| 8722 | CTSF | cathepsin F | -3.088 | 3.01 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 9973 | CCS | copper chaperone for superoxide dismutase | -0.636 | 1.961 |
| 5091 | PC | pyruvate carboxylase | -1.602 | 1.489 |
| 78999 | LRFN4 | leucine rich repeat and fibronectin type III domain containing 4 | 1.128 | 2.154 |
| 54961 | SSH3 | slingshot protein phosphatase 3 | 1.435 | 10.211 |
| 5499 | PPP1CA | protein phosphatase 1 catalytic subunit alpha | 0.325 | 1.924 |
| 374403 | TBC1D10C | TBC1 domain family member 10C | 1.538 | 29.664 |
| 57175 | CORO1B | coronin 1B | -1.778 | 11.688 |
| 5790 | PTPRCAP | protein tyrosine phosphatase receptor type C associated protein | -2.242 | 4.153 |
| 57010 | CABP4 | calcium binding protein 4 | -3.004 | 3.695 |
| 80194 | TMEM134 | transmembrane protein 134 | -0.744 | 2.053 |
| 9049 | AIP | aryl hydrocarbon receptor interacting protein | -0.498 | 1.576 |
| 91703 | ACY3 | aminoacylase 3 | -4.129 | 3.525 |
| 81622 | UNC93B1 | unc-93 homolog B1, TLR signaling regulator | -1.015 | 3.987 |
| 221 | ALDH3B1 | aldehyde dehydrogenase 3 family member B1 | 0.673 | 3.575 |
| 1119 | CHKA | choline kinase alpha | 1.156 | 5.478 |
| 51111 | KMT5B | lysine methyltransferase 5B | 0.391 | 1.824 |
| 53838 | C11orf24 | chromosome 11 open reading frame 24 | -1.222 | 7.338 |
| 9633 | TESMIN | testis expressed metallothionein like protein | 2.747 | 5.487 |
| 8772 | FADD | Fas associated via death domain | 1.347 | 6.287 |
| 1717 | DHCR7 | 7-dehydrocholesterol reductase | 3.254 | 11.372 |
| 55191 | NADSYN1 | NAD synthetase 1 | 0.778 | 4.395 |
| 10068 | IL18BP | interleukin 18 binding protein | -0.931 | 2.824 |
| 220074 | LRTOMT | leucine rich transmembrane and O-methyltransferase domain containing | 0.8 | 5.733 |
| 55004 | LAMTOR1 | late endosomal/lysosomal adaptor, MAPK and MTOR activator 1 | 0.688 | 5.512 |
| 25906 | ANAPC15 | anaphase promoting complex subunit 15 | 1.201 | 10.961 |
| 2352 | FOLR3 | folate receptor gamma | 2.366 | 8.588 |
| 2350 | FOLR2 | folate receptor beta | -3.003 | 11.326 |
| 89849 | ATG16L2 | autophagy related 16 like 2 | 0.648 | 1.517 |
| 5031 | P2RY6 | pyrimidinergic receptor P2Y6 | -3.34 | 7.179 |
| 9828 | ARHGEF17 | Rho guanine nucleotide exchange factor 17 | 3.205 | 7.296 |
| 100287837 | ARHGEF17-AS1 | ARHGEF17 antisense RNA 1 | 2.228 | 1.804 |
| 58473 | PLEKHOB1 | pleckstrin homology domain containing B1 | -2.097 | 2.288 |
| 51287 | COA4 | cytochrome c oxidase assembly factor 4 homolog | -0.818 | 3.371 |
| 7351 | UCP2 | uncoupling protein 2 | -1.406 | 5.521 |
| 283209 | PGM2L1 | phosphoglucomutase 2 like 1 | 1.527 | 5.975 |
| 10008 | KCNE3 | potassium voltage-gated channel subfamily E regulatory subunit 3 | -0.68 | 2.011 |
| 408 | ARRB1 | arrestin beta 1 | -1.999 | 9.418 |
| 81544 | GDPD5 | glycerophosphodiester phosphodiesterase domain containing 5 | -2.943 | 3.29 |
| 105369389 | LOC105369389 | uncharacterized LOC105369389 | -4.333 | 2.6 |
| 871 | SERPINH1 | serpin family H member 1 | -2.899 | 5.003 |
| 7405 | UVRAG | UV radiation resistance associated | -0.886 | 3.442 |
| 101928813 | LINC02757 | long intergenic non-protein coding RNA 2757 | -3.74 | 3.418 |
| 726 | CAPN5 | calpain 5 | -4.283 | 4.835 |
| 1207 | CLNS1A | chloride nucleotide-sensitive channel 1A | -0.909 | 3.532 |
| 79053 | ALG8 | ALG8 alpha-1,3-glucosyltransferase | -0.636 | 1.431 |
| 105369402 | LOC105369402 | uncharacterized LOC105369402 | 2.403 | 4.426 |
| 220042 | DDIAS | DNA damage induced apoptosis suppressor | 1.176 | 1.648 |
| 27314 | RAB30 | RAB30, member RAS oncogene family | -2.144 | 1.659 |
| 54843 | SYTL2 | synaptotagmin like 2 | -1.874 | 1.696 |
| 65084 | TMEM135 | transmembrane protein 135 | -1.048 | 3.176 |
| 23682 | RAB38 | RAB38, member RAS oncogene family | -2.062 | 2.883 |
| 1075 | CTSC | cathepsin C | -0.91 | 3.739 |
| 120103 | SLC36A4 | solute carrier family 36 member 4 | 0.855 | 4.163 |
| 56935 | SMCO4 | single-pass membrane protein with coiled-coil domains 4 | -1.838 | 10.307 |
| 85459 | CEP295 | centrosomal protein 295 | 0.683 | 1.504 |
| 24145 | PANX1 | pannexin 1 | -1.625 | 11.388 |
| 2526 | FUT4 | fucosyltransferase 4 | 1.693 | 4.703 |
| 105369438 | PIWI4-AS1 | PIWI4 antisense RNA 1 | 1.55 | 4.11 |
| 143689 | PIWI4 | piwi like RNA-mediated gene silencing 4 | 1.671 | 2.411 |
| 105369436 | LINC02700 | long intergenic non-protein coding RNA 2700 | -2.431 | 6.218 |
| 154810 | AMOTL1 | angiomotin like 1 | 2.481 | 3.867 |
| 10929 | SRSF8 | serine and arginine rich splicing factor 8 | -2.736 | 10.017 |
| 23052 | ENDOD1 | endonuclease domain containing 1 | -1.864 | 2.755 |
| 143684 | FAM76B | family with sequence similarity 76 member B | 0.628 | 1.734 |
| 8898 | MTMR2 | myotubularin related protein 2 | -0.835 | 2.708 |
| 84441 | MAML2 | mastermind like transcriptional coactivator 2 | -1.78 | 4.873 |
| 330 | BIRC3 | baculoviral IAP repeat containing 3 | -2.397 | 9.343 |
| 64066 | MMP27 | matrix metallopeptidase 27 | 4.128 | 4.664 |
| 4317 | MMP8 | matrix metallopeptidase 8 | 4.235 | 3.306 |
| 837 | CASP4 | caspase 4 | -1.021 | 2.2 |
| 838 | CASP5 | caspase 5 | -1.806 | 1.587 |
| 834 | CASP1 | caspase 1 | -1.829 | 7.875 |
| 114769 | CARD16 | caspase recruitment domain family member 16 | -0.797 | 2.511 |
| 84437 | MSANTD4 | Myb/SANT DNA binding domain containing 4 with coiled-coils | -1.206 | 4.282 |
| 91801 | ALKBHB8 | alkB homolog 8, tRNA methyltransferase | -1.765 | 7.543 |
| 54734 | RAB39A | RAB39A, member RAS oncogene family | -2.754 | 11.5 |
| 38 | ACAT1 | acetyl-CoA acetyltransferase 1 | 0.751 | 1.718 |
| 472 | ATM | ATM serine/threonine kinase | -0.818 | 1.9 |
| 143888 | POGLUT3 | protein O-glucosyltransferase 3 | 1.5 | 1.569 |
| 1662 | DDX10 | DEAD-box helicase 10 | -1.795 | 10.546 |
| 85463 | ZC3H12C | zinc finger CCCH-type containing 12C | 1.431 | 2.681 |
| 2230 | FDX1 | ferredoxin 1 | -0.963 | 2.898 |
| 5450 | POU2AF1 | POU class 2 homeobox associating factor 1 | -4.385 | 6.762 |
| 23235 | SIK2 | salt inducible kinase 2 | -0.978 | 4.617 |
| 79796 | ALG9 | ALG9 alpha-1,2-mannosyltransferase | 0.56 | 1.957 |
| 91893 | FDXACB1 | ferredoxin-fold anticondor binding domain containing 1 | -1.153 | 2.56 |
| 55216 | NKAPD1 | NKAP domain containing 1 | -0.696 | 2.279 |
| 6392 | SDHD | succinate dehydrogenase complex subunit D | -0.539 | 2.608 |
| 3606 | IL18 | interleukin 18 | 1.451 | 9.211 |
| 4684 | NCAM1 | neural cell adhesion molecule 1 | 2.281 | 1.433 |
| 54970 | TTC12 | tetratricopeptide repeat domain 12 | -1.624 | 3.884 |
| 57646 | USP28 | ubiquitin specific peptidase 28 | -0.609 | 1.628 |
| 4837 | NNMT | nicotinamide N-methyltransferase | 3.447 | 2.41 |
| 54494 | C11orf71 | chromosome 11 open reading frame 71 | 0.894 | 4.183 |
| 10179 | RBM7 | RNA binding motif protein 7 | 0.939 | 2.056 |
| 23387 | SIK3 | SIK family kinase 3 | -0.658 | 1.897 |
| 51092 | SIDT2 | SID1 transmembrane family member 2 | -2.192 | 11.252 |
| 100652768 | LOC100652768 | uncharacterized LOC100652768 | -2.072 | 10.012 |
| 6876 | TAGLN | transgelin | -1.629 | 6.315 |
| 9159 | PCSK7 | proprotein convertase subtilisin/kexin type 7 | -1.022 | 4.707 |
| 23621 | BACE1 | beta-secretase 1 | -1.099 | 3.131 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 100379571 | BACE1-AS | BACE1 antisense RNA | -1.247 | 1.473 |
| 22897 | CEP164 | centrosomal protein 164 | -1.366 | 8.259 |
| 100533181 | FXYD6-FXYD2 | FXYD6-FXYD2 readthrough | -1.827 | 4.57 |
| 53826 | FXYD6 | FXYD domain containing ion transport regulator 6 | -2.174 | 7.619 |
| 84000 | TMRSS13 | transmembrane serine protease 13 | -2.822 | 6.743 |
| 3587 | IL10RA | interleukin 10 receptor subunit alpha | -2.318 | 8.036 |
| 100526771 | SMIM35 | small integral membrane protein 35 | -2.21 | 7.243 |
| 196264 | MPZL3 | myelin protein zero like 3 | 1.287 | 4.023 |
| 10205 | MPZL2 | myelin protein zero like 2 | -2.703 | 9.312 |
| 916 | CD3E | CD3 epsilon subunit of T-cell receptor complex | -3.408 | 1.5 |
| 915 | CD3D | CD3 delta subunit of T-cell receptor complex | -3.179 | 1.94 |
| 917 | CD3G | CD3 gamma subunit of T-cell receptor complex | -3.201 | 1.803 |
| 9354 | UBE4A | ubiquitination factor E4A | -0.573 | 2.603 |
| 100131626 | LOC100131626 | uncharacterized LOC100131626 | -0.825 | 1.322 |
| 4297 | KMT2A | lysine methyltransferase 2A | -0.561 | 4.425 |
| 105369519 | LOC105369519 | uncharacterized LOC105369519 | -1.668 | 2.128 |
| 1656 | DDX6 | DEAD-box helicase 6 | 0.687 | 2.189 |
| 643 | CXCR5 | C-X-C motif chemokine receptor 5 | -0.984 | 2.662 |
| 283149 | BCL9L | BCL9 like | -0.969 | 3.207 |
| 6230 | RPS25 | ribosomal protein S25 | -0.592 | 1.965 |
| 51399 | TRAPPC4 | trafficking protein particle complex subunit 4 | 0.888 | 2.486 |
| 2542 | SLC37A4 | solute carrier family 37 member 4 | 0.763 | 1.569 |
| 10525 | HYOU1 | hypoxia up-regulated 1 | -0.605 | 1.662 |
| 3145 | HMBS | hydroxymethylbilane synthase | -0.803 | 1.407 |
| 3014 | H2AX | H2A.X variant histone | 2.289 | 8.59 |
| 1798 | DPAGT1 | dolichyl-phosphate N-acetylglucosaminyltransferase 1 | -0.418 | 1.861 |
| 79671 | NLRX1 | NLR family member X1 | 1.222 | 4.843 |
| 4162 | MCAM | melanoma cell adhesion molecule | 0.517 | 2.059 |
| 5818 | NECTIN1 | nectin cell adhesion molecule 1 | 1.64 | 3.415 |
| 105369525 | NECTIN1-AS1 | NECTIN1 antisense RNA 1 | 3.143 | 3.005 |
| 220323 | OAF | out at first homolog | -2.535 | 8.654 |
| 23365 | ARHGEF12 | Rho guanine nucleotide exchange factor 12 | -1.272 | 2.196 |
| 219899 | TBCEL | tubulin folding cofactor E like | -1.568 | 4.328 |
| 7007 | TECTA | tectorin alpha | -3.42 | 4.532 |
| 6653 | SORL1 | sortilin related receptor 1 | 1.345 | 4.523 |
| 105369535 | LOC105369535 | uncharacterized LOC105369535 | 1.061 | 1.374 |
| 56253 | CRTAM | cytotoxic and regulatory T cell molecule | -3.039 | 2.993 |
| 79864 | JHY | junctional cadherin complex regulator | -3.679 | 5.062 |
| 3312 | HSPA8 | heat shock protein family A (Hsp70) member 8 | -0.684 | 2.211 |
| 85389 | SNORD14C | small nucleolar RNA, C/D box 14C | 2.01 | 1.59 |
| 101929289 | LOC101929289 | | 1.401 | 1.983 |
| 55800 | SCN3B | sodium voltage-gated channel beta subunit 3 | -1.638 | 1.634 |
| 4013 | VWA5A | von Willebrand factor A domain containing 5A | -0.876 | 1.643 |
| 84897 | TBRG1 | transforming growth factor beta regulator 1 | -0.326 | 1.315 |
| 54414 | SIAE | sialic acid acetyltransferase | -1.035 | 3.894 |
| 4900 | NRGN | neurogranin | -1.511 | 3.143 |
| 23584 | VSIG2 | V-set and immunoglobulin domain containing 2 | -1.544 | 1.826 |
| 79684 | MSANTD2 | Myb/SANT DNA binding domain containing 2 | -1.857 | 6.177 |
| 64221 | ROBO3 | roundabout guidance receptor 3 | -2.767 | 3.569 |
| 80071 | CCDC15 | coiled-coil domain containing 15 | 1.505 | 2.954 |
| 219855 | SLC37A2 | solute carrier family 37 member 2 | -3.002 | 8.209 |
| 9538 | EI24 | EI24 autophagy associated transmembrane protein | -0.64 | 1.394 |
| 1111 | CHEK1 | checkpoint kinase 1 | 2.437 | 5.097 |
| 83480 | PUS3 | pseudouridine synthase 3 | -1.09 | 2.7 |
| 399972 | GSEC | G-quadruplex forming sequence containing lncRNA | 1.486 | 1.462 |
| 105369565 | LOC105369565 | uncharacterized LOC105369565 | 2.552 | 1.923 |
| 9743 | ARHGAP32 | Rho GTPase activating protein 32 | -2.512 | 10.5 |
| 399975 | LOC399975 | uncharacterized LOC399975 | -1.631 | 2.498 |
| 120224 | TMEM45B | transmembrane protein 45B | 1.839 | 1.992 |
| 4798 | NFRKB | nuclear factor related to kappaB binding protein | 0.661 | 1.693 |
| 334 | APLP2 | amyloid beta precursor like protein 2 | -1.483 | 6.421 |
| 6768 | ST14 | ST14 transmembrane serine protease matriptase | -0.708 | 1.755 |
| 23310 | NCAPD3 | non-SMC condensin II complex subunit D3 | 1 | 2.286 |
| 112936 | VPS26B | VPS26 retromer complex component B | 0.994 | 10.087 |
| 29087 | THYN1 | thymocyte nuclear protein 1 | 1.373 | 14.245 |
| 27034 | ACAD8 | acyl-CoA dehydrogenase family member 8 | 2.817 | 15.439 |
| 6539 | SLC6A12 | solute carrier family 6 member 12 | -3.497 | 15.784 |
| 4815 | NINJ2 | ninjurin 2 | 1.297 | 7.327 |
| 100049716 | NINJ2-AS1 | NINJ2 antisense RNA 1 | 1.683 | 7.382 |
| 23085 | ERC1 | ELKS/RAB6-interacting/CAST family member 1 | -0.652 | 3.922 |
| 81029 | WNT5B | Wnt family member 5B | 1.475 | 1.955 |
| 144699 | FBXL14 | F-box and leucine rich repeat protein 14 | -1.034 | 3.081 |
| 93589 | CACNA2D4 | calcium voltage-gated channel auxiliary subunit alpha2delta 4 | -1.113 | 3.121 |
| 196513 | DCP1B | decapping mRNA 1B | -1.09 | 2.583 |
| 283440 | ITFG2-AS1 | ITFG2 antisense RNA 1 | -1.314 | 1.888 |
| 2288 | FKBP4 | FKBP prolyl isomerase 4 | -2.062 | 13.508 |
| 55846 | ITFG2 | integrin alpha FG-GAP repeat containing 2 | -0.694 | 2.741 |
| 83714 | NRIP2 | nuclear receptor interacting protein 2 | -1.202 | 4.957 |
| 2305 | FOXM1 | forkhead box M1 | 2.745 | 4.602 |
| 7289 | TULP3 | TUB like protein 3 | -1.556 | 2.293 |
| 84766 | CRACR2A | calcium release activated channel regulator 2A | 1.03 | 5.249 |
| 57097 | PARP11 | poly(ADP-ribose) polymerase family member 11 | -1.193 | 3.073 |
| 105369612 | LOC105369612 | uncharacterized LOC105369612 | 3.984 | 4.546 |
| 103752584 | CCND2-AS1 | CCND2 antisense RNA 1 | 1.888 | 4.459 |
| 894 | CCND2 | cyclin D2 | 1.9 | 6.952 |
| 57103 | TIGAR | TP53 induced glycolysis regulatory phosphatase | -1.258 | 3.495 |
| 10635 | RAD51AP1 | RAD51 associated protein 1 | 2.48 | 3.096 |
| 8798 | DYRK4 | dual specificity tyrosine phosphorylation regulated kinase 4 | 1.243 | 9.468 |
| 4055 | LTBR | lymphotoxin beta receptor | -1.165 | 5.585 |
| 939 | CD27 | CD27 molecule | -1.194 | 1.489 |
| 55080 | TAPBPL | TAP binding protein like | -0.721 | 4.387 |
| 6843 | VAMP1 | vesicle associated membrane protein 1 | 2.44 | 10.763 |
| 51258 | MRPL51 | mitochondrial ribosomal protein L51 | 1.148 | 7.422 |
| 9918 | NCAPD2 | non-SMC condensin I complex subunit D2 | 1.369 | 3.11 |
| 112268089 | GAPDH-DT | GAPDH divergent transcript | 1.426 | 3.834 |
| 2597 | GAPDH | glyceraldehyde-3-phosphate dehydrogenase | 1.476 | 16.162 |
| 25900 | IFFO1 | intermediate filament family orphan 1 | -0.695 | 2.345 |
| 57121 | LPAR5 | lysophosphatidic acid receptor 5 | -2.353 | 2.456 |
| 84519 | ACRBP | acrosin binding protein | -1.178 | 9.136 |
| 171017 | ZNF384 | zinc finger protein 384 | 0.479 | 2.867 |
| 8079 | MLF2 | myeloid leukemia factor 2 | 0.87 | 4.859 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 920 | CD4 | CD4 molecule | -3.444 | 27.695 |
| 27239 | GPR162 | G protein-coupled receptor 162 | -2.616 | 10.416 |
| 2784 | GNB3 | G protein subunit beta 3 | 2.344 | 2.34 |
| 83461 | CDC43 | cell division cycle associated 3 | 2.967 | 2.978 |
| 84727 | SPSB2 | spiA/ryanodine receptor domain and SOCS box containing 2 | 1.406 | 5.351 |
| 105369632 | LOC105369632 | uncharacterized LOC105369632 | 1.02 | 1.475 |
| 283345 | RPL13P5 | ribosomal protein L13 pseudogene 5 | 0.872 | 1.61 |
| 171220 | DSTNP2 | DSTN pseudogene 2 | 0.974 | 1.719 |
| 2026 | ENO2 | enolase 2 | -1.723 | 2.274 |
| 1822 | ATN1 | atrophin 1 | -2.049 | 4.262 |
| 113246 | C12orf57 | chromosome 12 open reading frame 57 | 0.996 | 2.393 |
| 100147744 | RNU7-1 | RNA, U7 small nuclear 1 | 2.23 | 2.05 |
| 715 | C1R | complement C1r | 1.669 | 2.303 |
| 51279 | C1RL | complement C1r subcomponent like | 1.728 | 11.122 |
| 283314 | C1RL-AS1 | C1RL antisense RNA 1 | 1.922 | 12.182 |
| 83758 | RBP5 | retinol binding protein 5 | 2.019 | 10.141 |
| 9746 | CLSTN3 | calsyntenin 3 | 2.138 | 11.559 |
| 144195 | SLC2A14 | solute carrier family 2 member 14 | 1.525 | 3.019 |
| 6515 | SLC2A3 | solute carrier family 2 member 3 | 1.251 | 2.52 |
| 719 | C3AR1 | complement C3a receptor 1 | -0.807 | 1.449 |
| 50856 | CLEC4A | C-type lectin domain family 4 member A | -1.453 | 2.693 |
| 653113 | FAM86FP | family with sequence similarity 86, member A pseudogene | -2.211 | 2.142 |
| 101927905 | LINC02449 | long intergenic non-protein coding RNA 2449 | -2.101 | 2.097 |
| 389634 | LINC00937 | long intergenic non-protein coding RNA 937 | -2.004 | 2.834 |
| 93978 | CLEC6A | C-type lectin domain containing 6A | -1.504 | 1.491 |
| 338339 | CLEC4D | C-type lectin domain family 4 member D | 1.993 | 7.499 |
| 1911 | PHC1 | polyhomeotic homolog 1 | -1.516 | 14.731 |
| 4074 | M6PR | mannose-6-phosphate receptor, cation dependent | -1.289 | 10.724 |
| 100499405 | LINC00987 | long intergenic non-protein coding RNA 987 | -0.617 | 1.435 |
| 642846 | LOC642846 | DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11-like | 1.833 | 5.47 |
| 728715 | LOC728715 | ovostatin homolog 2 | 3.268 | 5.46 |
| 107987172 | LOC107987172 | | 2.417 | 4.031 |
| 440081 | DDX12P | DEAD/H-box helicase 12, pseudogene | 2.215 | 4.267 |
| 160365 | CLECL1P | C-type lectin like 1, pseudogene | -2.713 | 3.733 |
| 969 | CD69 | CD69 molecule | -1.898 | 3.591 |
| 51348 | KLRF1 | killer cell lectin like receptor F1 | -2.645 | 2.697 |
| 51267 | CLEC1A | C-type lectin domain family 1 member A | -1.895 | 1.707 |
| 64581 | CLEC7A | C-type lectin domain containing 7A | -2.003 | 3.736 |
| 4973 | OLR1 | oxidized low density lipoprotein receptor 1 | 2.725 | 3.344 |
| 120939 | TMEM52B | transmembrane protein 52B | 1.77 | 2.034 |
| 8531 | YBX3 | Y-box binding protein 3 | -1.845 | 4.591 |
| 2120 | ETV6 | ETS variant transcription factor 6 | -0.663 | 2.499 |
| 4040 | LRP6 | LDL receptor related protein 6 | 1.542 | 1.807 |
| 54682 | MANSC1 | MANSC domain containing 1 | 3.214 | 9.972 |
| 503693 | LOH12CR2 | loss of heterozygosity on chromosome 12, region 2 | 1.607 | 1.574 |
| 118426 | BORCS5 | BLOC-1 related complex subunit 5 | 1.645 | 5.46 |
| 107984485 | LOC107984485 | | 1.281 | 2.896 |
| 80824 | DUSP16 | dual specificity phosphatase 16 | 1.507 | 3.897 |
| 1389 | CREBL2 | cAMP responsive element binding protein like 2 | -1.391 | 9.652 |
| 50865 | HEBP1 | heme binding protein 1 | -0.932 | 2.017 |
| 93164 | HTR7P1 | 5-hydroxytryptamine receptor 7 pseudogene 1 | -1.09 | 2.878 |
| 57613 | FAM234B | family with sequence similarity 234 member B | -0.85 | 1.698 |
| 79887 | PLBD1 | phospholipase B domain containing 1 | 2.017 | 16.895 |
| 101928317 | LOC101928317 | uncharacterized LOC101928317 | 2.106 | 16.328 |
| 101928290 | PLBD1-AS1 | PLBD1 antisense RNA 1 | 1.609 | 6.024 |
| 2984 | GUCY2C | guanylate cyclase 2C | 1.129 | 2.035 |
| 51729 | WBP11 | WW domain binding protein 11 | -0.824 | 5.849 |
| 121506 | ERP27 | endoplasmic reticulum protein 27 | 0.893 | 2.387 |
| 397 | ARHGDIB | Rho GDP dissociation inhibitor beta | 1.091 | 7.777 |
| 5149 | PDE6H | phosphodiesterase 6H | 3.573 | 5.88 |
| 5800 | PTPRO | protein tyrosine phosphatase receptor type O | -2.996 | 11.799 |
| 2059 | EPS8 | epidermal growth factor receptor pathway substrate 8 | -1.552 | 2.055 |
| 4257 | MGST1 | microsomal glutathione S-transferase 1 | 0.901 | 1.519 |
| 5965 | RECQL | RecQ like helicase | -0.539 | 1.885 |
| 9847 | C2CD5 | C2 calcium dependent domain containing 5 | -0.925 | 3.845 |
| 55500 | ETNK1 | ethanolamine kinase 1 | -0.465 | 2.069 |
| 3709 | ITPR2 | inositol 1,4,5-trisphosphate receptor type 2 | -0.624 | 1.544 |
| 55726 | INTS13 | integrator complex subunit 13 | 0.645 | 1.682 |
| 51768 | TM7SF3 | transmembrane 7 superfamily member 3 | 0.762 | 1.506 |
| 9412 | MED21 | mediator complex subunit 21 | 0.99 | 2.45 |
| 60488 | MRPS35 | mitochondrial ribosomal protein S35 | -0.886 | 2.342 |
| 101928705 | LOC101928705 | | -1.045 | 1.518 |
| 55711 | FAR2 | fatty acyl-CoA reductase 2 | 2.266 | 4.127 |
| 100506606 | LOC100506606 | uncharacterized LOC100506606 | 1.933 | 5.241 |
| 65981 | CAPRIN2 | caprin family member 2 | -0.814 | 1.648 |
| 1663 | DDX11 | DEAD/H-box helicase 11 | 1.176 | 2.633 |
| 160518 | DEND5B | DENN domain containing 5B | -2.031 | 1.983 |
| 196394 | AMN1 | antagonist of mitotic exit network 1 homolog | 1.163 | 3.97 |
| 636 | BICD1 | BICD cargo adaptor 1 | -2.055 | 2.436 |
| 5318 | PKP2 | plakophilin 2 | 1.791 | 1.871 |
| 84920 | ALG10 | ALG10 alpha-1,2-glucosyltransferase | 0.653 | 1.329 |
| 144402 | CPNE8 | copine 8 | -1.537 | 9.563 |
| 283463 | MUC19 | mucin 19, oligomeric | 2.298 | 1.492 |
| 4753 | NELL2 | neural EGFL like 2 | -5.139 | 6.579 |
| 196527 | ANO6 | anoctamin 6 | -0.466 | 1.327 |
| 400027 | LINC00938 | long intergenic non-protein coding RNA 938 | 0.829 | 2.591 |
| 196528 | ARID2 | AT-rich interaction domain 2 | 0.572 | 2.057 |
| 81539 | SLC38A1 | solute carrier family 38 member 1 | 1.5 | 2.251 |
| 54407 | SLC38A2 | solute carrier family 38 member 2 | 0.83 | 1.994 |
| 91523 | PCED1B | PC-esterase domain containing 1B | -1.434 | 1.391 |
| 105369748 | RPAP3-DT | RPAP3 divergent transcript | -0.886 | 1.661 |
| 55652 | SLC48A1 | solute carrier family 48 member 1 | 0.812 | 4.049 |
| 51564 | HDAC7 | histone deacetylase 7 | 0.729 | 1.531 |
| 7421 | VDR | vitamin D receptor | -0.571 | 1.396 |
| 79022 | TMEM106C | transmembrane protein 106C | 2.327 | 3.647 |
| 5213 | PFKM | phosphofructokinase, muscle | -1.74 | 5.49 |
| 140461 | ASB8 | ankyrin repeat and SOCS box containing 8 | 0.634 | 2.159 |
| 54934 | KANSL2 | KAT8 regulatory NSL complex subunit 2 | 0.936 | 2.489 |
| 904 | CCNT1 | cyclin T1 | 0.844 | 2.447 |
| 23109 | DDN | dendrin | 2.065 | 2.617 |
| 55716 | LMBR1L | limb development membrane protein 1 like | -0.57 | 1.32 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 84790 | TUBA1C | tubulin alpha 1c | 0.592 | 1.648 |
| 101927267 | TROAP-AS1 | TROAP and PRPH antisense RNA 1 | 2.827 | 2.866 |
| 10024 | TROAP | trophinin associated protein | 2.884 | 1.377 |
| 57701 | NCKAP5L | NCK associated protein 5 like | -1.056 | 2.834 |
| 105369763 | LOC105369763 | uncharacterized LOC105369763 | 5.422 | 10.449 |
| 29127 | RACGAP1 | Rac GTPase activating protein 1 | 1.868 | 3.433 |
| 613227 | HIGD1C | HIG1 hypoxia inducible domain family member 1C | -1.927 | 1.416 |
| 4891 | SLC11A2 | solute carrier family 11 member 2 | -1.387 | 7.676 |
| 7024 | TFCP2 | transcription factor CP2 | -0.495 | 1.489 |
| 51411 | BIN2 | bridging integrator 2 | 0.676 | 2.603 |
| 105369767 | LOC105369767 | uncharacterized LOC105369767 | 1.847 | 5.661 |
| 11226 | GALNT6 | polypeptide N-acetyl/galactosaminyltransferase 6 | -2.932 | 25.153 |
| 9498 | SLC4A8 | solute carrier family 4 member 8 | -3.728 | 11.172 |
| 6334 | SCN8A | sodium voltage-gated channel alpha subunit 8 | 2.162 | 1.895 |
| 94 | ACVRL1 | activin A receptor like type 1 | -1.714 | 2.226 |
| 692159 | TAMALIN-AS1 | TAMALIN antisense RNA 1 | -1.767 | 1.822 |
| 160622 | TAMALIN | trafficking regulator and scaffold protein tamalin | -2.045 | 2.845 |
| 3164 | NR4A1 | nuclear receptor subfamily 4 group A member 1 | -3.929 | 11.078 |
| 107984510 | LOC107984510 | uncharacterized LOC107984510 | -3.28 | 4.922 |
| 60673 | ATG101 | autophagy related 101 | -0.576 | 1.412 |
| 51380 | CSAD | cysteine sulfenic acid decarboxylase | 0.814 | 4.389 |
| 283337 | ZNF740 | zinc finger protein 740 | -0.699 | 2.302 |
| 3695 | ITGB7 | integrin subunit beta 7 | -2.928 | 10.562 |
| 5916 | RARG | retinoic acid receptor gamma | -2.504 | 13.344 |
| 9700 | ESPL1 | extra spindle pole bodies like 1, separase | 2.968 | 3.592 |
| 5204 | PFDN5 | prefoldin subunit 5 | -0.838 | 3.32 |
| 112268097 | MYG1-AS1 | MYG1 antisense RNA 1 | -0.755 | 2.721 |
| 60314 | MYG1 | MYG1 exonuclease | -0.998 | 2.847 |
| 54458 | PRR13 | proline rich 13 | 0.66 | 3.679 |
| 6895 | TARBP2 | TARBP2 subunit of RISC loading complex | -1.126 | 2.839 |
| 11016 | ATF7 | activating transcription factor 7 | 0.433 | 1.442 |
| 517 | ATP5MC2 | ATP synthase membrane subunit c locus 2 | -0.64 | 2.98 |
| 23468 | CBX5 | chromobox 5 | 1.103 | 2.302 |
| 4778 | NFE2 | nuclear factor, erythroid 2 | 0.897 | 2.009 |
| 53831 | GPR84 | G protein-coupled receptor 84 | 1.762 | 2.276 |
| 25946 | ZNF385A | zinc finger protein 385A | -2.472 | 6.532 |
| 3071 | NCKAP1L | NCK associated protein 1 like | -0.563 | 5.038 |
| 9840 | TESPA1 | thymocyte expressed, positive selection associated 1 | -3.206 | 4.866 |
| 196410 | METTL7B | methytransferase like 7B | 2.165 | 2.277 |
| 3679 | ITGA7 | integrin subunit alpha 7 | 2.309 | 5.039 |
| 100528022 | BLOC1S1-RDH5 | BLOC1S1-RDH5 readthrough | 0.957 | 4.401 |
| 2647 | BLOC1S1 | biogenesis of lysosomal organelles complex 1 subunit 1 | 0.956 | 4.332 |
| 5959 | RDH5 | retinol dehydrogenase 5 | 1.342 | 4.261 |
| 967 | CD63 | CD63 molecule | 1.492 | 5.829 |
| 84324 | SARNP | SAP domain containing ribonucleoprotein | 0.528 | 1.763 |
| 29095 | ORMDL2 | ORMDL sphingolipid biosynthesis regulator 2 | 0.445 | 1.302 |
| 1606 | DGKA | diacylglycerol kinase alpha | 0.723 | 3.037 |
| 1017 | CDK2 | cyclin dependent kinase 2 | 1.727 | 3.072 |
| 5869 | RAB5B | RAB5B, member RAS oncogene family | 1.117 | 4.019 |
| 6821 | SUOX | sulfite oxidase | 1.026 | 4.816 |
| 5036 | PA2G4 | proliferation-associated 2G4 | -0.478 | 1.465 |
| 6171 | RPL41 | ribosomal protein L41 | -0.613 | 3.336 |
| 23344 | ESYT1 | extended synaptotagmin 1 | -0.805 | 4.313 |
| 140465 | MYL6B | myosin light chain 6B | 1.238 | 6.399 |
| 4637 | MYL6 | myosin light chain 6 | 1.344 | 9.162 |
| 1431 | CS | citrate synthase | 0.716 | 2.68 |
| 51561 | IL23A | interleukin 23 subunit alpha | -2.448 | 6.279 |
| 6773 | STAT2 | signal transducer and activator of transcription 2 | -2.017 | 7.848 |
| 8914 | TIMELESS | timeless circadian regulator | 1.279 | 2.107 |
| 5939 | RBMS2 | RNA binding motif single stranded interacting protein 2 | -2.068 | 10.836 |
| 506 | ATP5F1B | ATP synthase F1 subunit beta | -0.355 | 1.759 |
| 692090 | SNORD59B | small nucleolar RNA, C/D box 59B | 1.451 | 2.529 |
| 10728 | PTGES3 | prostaglandin E synthase 3 | -1.014 | 3.28 |
| 4666 | NACA | nascent polypeptide associated complex subunit alpha | -0.53 | 1.469 |
| 5557 | PRIM1 | DNA primase subunit 1 | 1.228 | 1.699 |
| 9880 | ZBTB39 | zinc finger and BTB domain containing 39 | -1.211 | 4.253 |
| 4640 | MYO1A | myosin IA | -2.304 | 3.708 |
| 4035 | LRP1 | LDL receptor related protein 1 | -2.549 | 7.243 |
| 105751187 | LRP1-AS | LRP1 antisense RNA | -2.657 | 6.4 |
| 246329 | STAC3 | SH3 and cysteine rich domain 3 | -1.14 | 2.47 |
| 2735 | GLI1 | GLI family zinc finger 1 | 1.252 | 3.982 |
| 64333 | ARHGAP9 | Rho GTPase activating protein 9 | 1.142 | 3.607 |
| 114785 | MBD6 | methyl-CpG binding domain protein 6 | 1.179 | 6.16 |
| 10540 | DCTN2 | dynactin subunit 2 | 0.583 | 2.977 |
| 79837 | PIP4K2C | phosphatidylinositol-5-phosphate 4-kinase type 2 gamma | 1.005 | 4.096 |
| 196403 | DTX3 | deltex E3 ubiquitin ligase 3 | -2.845 | 2.072 |
| 116986 | AGAP2 | ArfGAP with GTPase domain, ankyrin repeat and PH domain 2 | 1.939 | 5.364 |
| 100130776 | AGAP2-AS1 | AGAP2 antisense RNA 1 | 1.923 | 5.105 |
| 4234 | METTL1 | methytransferase 1, tRNA methylguanosine | -1.335 | 1.345 |
| 25895 | EEF1AKMT3 | EEF1A lysine methyltransferase 3 | -1.325 | 1.436 |
| 100506844 | GIHCG | GIHCG inhibitor of miR-200b/200a/429 expression | 2.242 | 3.713 |
| 91419 | ATP23 | ATP23 metallopeptidase and ATP synthase assembly factor homolog | 1.422 | 3.526 |
| 9194 | SLC16A7 | solute carrier family 16 member 7 | -1.409 | 3.74 |
| 338811 | TAFA2 | TAFA chemokine like family member 2 | 1.934 | 2.998 |
| 57460 | PPM1H | protein phosphatase, Mg2+/Mn2+ dependent 1H | 1.149 | 4.688 |
| 144577 | KICS2 | KICSTOR subunit 2 | -0.732 | 1.573 |
| 2799 | GNS | glucosamine (N-acetyl)-6-sulfatase | -0.94 | 3.757 |
| 23592 | LEMD3 | LEM domain containing 3 | 0.917 | 3.986 |
| 253827 | MSRB3 | methionine sulfoxide reductase B3 | 2.388 | 2.251 |
| 100129940 | HMGAA2-AS1 | HMGAA2 antisense RNA 1 | 2.473 | 3.849 |
| 11213 | IRAK3 | interleukin 1 receptor associated kinase 3 | 0.712 | 1.312 |
| 92797 | HELB | DNA helicase B | -0.877 | 3.084 |
| 8445 | DYRK2 | dual specificity tyrosine phosphorylation regulated kinase 2 | -1.812 | 8.147 |
| 105369816 | LOC105369816 | uncharacterized LOC105369816 | -3.191 | 2.216 |
| 105369818 | LOC105369818 | uncharacterized LOC105369818 | 2.239 | 2.225 |
| 56890 | MDM1 | Mdm1 nuclear protein | 1.204 | 10.471 |
| 100507195 | LINC02384 | long intergenic non-protein coding RNA 2384 | 1.029 | 1.456 |
| 55508 | SLC35E3 | solute carrier family 35 member E3 | 0.529 | 1.491 |
| 1368 | CPM | carboxypeptidase M | -0.627 | 1.735 |
| 11052 | CPSF6 | cleavage and polyadenylation specific factor 6 | 0.468 | 1.646 |
| 8089 | YEATS4 | YEATS domain containing 4 | 1.45 | 2.427 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 117177 | RAB3IP | RAB3A interacting protein | 1.711 | 6.608 |
| 4848 | CNOT2 | CCR4-NOT transcription complex subunit 2 | -0.364 | 1.579 |
| 55266 | TMEM19 | transmembrane protein 19 | -1.763 | 8.698 |
| 23011 | RAB21 | RAB21, member RAS oncogene family | 0.73 | 3.862 |
| 11010 | GLIPR1 | GLI pathogenesis related 1 | -1.26 | 3.531 |
| 22822 | PHLDA1 | pleckstrin homology like domain family A member 1 | 2.031 | 1.597 |
| 4673 | NAP1L1 | nucleosome assembly protein 1 like 1 | -1.075 | 3.569 |
| 105369851 | LOC105369851 | uncharacterized LOC105369851 | 2.694 | 1.355 |
| 23390 | ZDHHC17 | zinc finger DHHC-type palmitoyltransferase 17 | 1.049 | 5.329 |
| 89795 | NAV3 | neuron navigator 3 | 4.204 | 4.448 |
| 4659 | PPP1R12A | protein phosphatase 1 regulatory subunit 12A | 0.882 | 5.219 |
| 105369865 | PPP1R12A-AS1 | PPP1R12A antisense RNA 1 | 1.584 | 1.433 |
| 8825 | LIN7A | lin-7 homolog A, crumbs cell polarity complex component | 2.458 | 8.791 |
| 105369869 | LOC105369869 | chromosome 12 open reading frame 29 | 2.361 | 9.287 |
| 91298 | C12orf29 | ATPase plasma membrane Ca2+ transporting 1 | 2.391 | 3.862 |
| 490 | ATP2B1 | ATP2B1 antisense RNA 1 | -1.439 | 4.48 |
| 338758 | ATP2B1-AS1 | long intergenic non-protein coding RNA 1619 | -1.986 | 2.295 |
| 256021 | LINC01619 | BTG1 divergent transcript | 0.717 | 1.408 |
| 101928617 | BTG1-DT | uncharacterized LOC643339 | -3.046 | 2.016 |
| 643339 | LOC643339 | nudix hydrolase 4 | 2.148 | 1.573 |
| 11163 | NUDT4 | CASP2 and RIPK1 domain containing adaptor with death domain | 1.287 | 3.59 |
| 8738 | CRADD | FYVE, RhoGEF and PH domain containing 6 | 1.018 | 3.721 |
| 55785 | FGD6 | 112268099 LOC112268099 | -3.045 | 6.709 |
| 55591 | VEZT | vezatin, adherens junctions transmembrane protein | -3.31 | 4.035 |
| 3034 | HAL | histidine ammonia-lyase | -0.613 | 2.034 |
| 102723340 | LOC102723340 | uncharacterized LOC102723340 | 1.017 | 3.041 |
| 4048 | LTA4H | leukotriene A4 hydrolase | 1.41 | 7.809 |
| 2004 | ELK3 | ETS transcription factor ELK3 | 1.283 | 7.371 |
| 121441 | NEDD1 | NEDD1 gamma-tubulin ring complex targeting factor | 1.293 | 2.485 |
| 121456 | SLC9A7P1 | solute carrier family 9 member 7 pseudogene 1 | -2.989 | 11.24 |
| 317 | APAF1 | apoptotic peptidase activating factor 1 | 1.24 | 7.059 |
| 56899 | ANKS1B | ankyrin repeat and sterile alpha motif domain containing 1B | 1.177 | 5.144 |
| 55592 | GOLGA2P5 | GOLGA2 pseudogene 5 | 2.165 | 2.719 |
| 56994 | CHPT1 | choline phosphotransferase 1 | 1.052 | 8.311 |
| 50511 | SYCP3 | synaptonemal complex protein 3 | 1.333 | 2.939 |
| 79158 | GNPTAB | N-acetylglucosamine-1-phosphate transferase subunits alpha and beta | -0.747 | 5.219 |
| 55010 | PARPBP | PARP1 binding protein | 1.819 | 2.092 |
| 5367 | PMCH | pro-melanin concentrating hormone | 2.154 | 1.814 |
| 55576 | STAB2 | stabilin 2 | 2.349 | 1.702 |
| 51559 | NT5DC3 | 5'-nucleotidase domain containing 3 | 2.566 | 5.016 |
| 7296 | TXNRD1 | thioredoxin reductase 1 | 0.851 | 3.879 |
| 50515 | CHST11 | carbohydrate sulfotransferase 11 | -0.976 | 1.66 |
| 121053 | NOPCHAP1 | NOP protein chaperone 1 | -2.09 | 6.025 |
| 55198 | APPL2 | adaptor protein, phosphotyrosine interacting with PH domain and leucine zipper 2 | 1.111 | 6.401 |
| 105369953 | LOC105369953 | cytoskeleton associated protein 4 | 1.224 | 1.447 |
| 10970 | CKAP4 | t-complex 11 like 2 | 2.129 | 22.871 |
| 255394 | TCP11L2 | transmembrane protein 263 | 1.546 | 8.209 |
| 90488 | TMEM263 | ankyrin repeat and BTB domain containing 3 | -1.558 | 1.886 |
| 121551 | ABTB3 | chemerin chemokine-like receptor 1 | -1.548 | 2.288 |
| 1240 | CMKLRL1 | USP30 antisense RNA 1 | -2.8 | 3.124 |
| 100131733 | USP30-AS1 | alkB homolog 2, alpha-ketoglutarate dependent dioxygenase | -2.107 | 3.399 |
| 121642 | ALKBH2 | ubiquitin protein ligase E3B | -1.888 | 5 |
| 89910 | UBE3B | mevalonate kinase | -0.371 | 1.471 |
| 4598 | MVK | transient receptor potential cation channel subfamily V member 4 | 1.241 | 1.567 |
| 59341 | TRPV4 | GIT ArfGAP 2 | -2.487 | 3.805 |
| 9815 | GIT2 | ATPase sarcoplasmic/endoplasmic reticulum Ca2+ transporting 2 | 0.372 | 1.36 |
| 488 | ATP2A2 | anaphase promoting complex subunit 7 | -0.944 | 3.272 |
| 51434 | ANAPC7 | actin related protein 2/3 complex subunit 3 | 0.536 | 2.37 |
| 10094 | ARPC3 | tectonic family member 1 | 0.439 | 2.678 |
| 79600 | TCTN1 | hydrogen voltage gated channel 1 | -1.576 | 2.244 |
| 84329 | HVCN1 | protein phosphatase 1 catalytic subunit gamma | -1.568 | 3.047 |
| 5501 | PPP1CC | PH domain containing endocytic trafficking adaptor 1 | -0.523 | 2.69 |
| 144717 | PHETA1 | SH2B adaptor protein 3 | -2.54 | 8.874 |
| 10019 | SH2B3 | BRCA1 associated protein | -1.626 | 9.735 |
| 8315 | BRAP | MAPK activated protein kinase 5 | 0.682 | 1.82 |
| 8550 | MAPKAPK5 | N-alpha-acetyltransferase 25, NatB auxiliary subunit | -0.589 | 3.597 |
| 80018 | NAA25 | 2'-5'-oligoadenylate synthetase 1 | -0.724 | 2.182 |
| 4938 | OAS1 | 2'-5'-oligoadenylate synthetase 3 | -3.355 | 7.502 |
| 4940 | OAS3 | 2'-5'-oligoadenylate synthetase 2 | -3.56 | 2.257 |
| 4939 | OAS2 | cilia and flagella associated protein 73 | -3.783 | 5.161 |
| 387885 | CFAP73 | DEAD-box helicase 54 | -0.902 | 2.357 |
| 79039 | DDX54 | IQ motif containing D | -1.003 | 4.251 |
| 115811 | IQCD | two pore segment channel 1 | -2.327 | 2.162 |
| 53373 | TPCN1 | solute carrier family 8 member B1 | -3.095 | 7.26 |
| 80024 | SLC8B1 | phospholipase B domain containing 2 | 0.689 | 3.26 |
| 196463 | PLBD2 | serine dehydratase | -2.179 | 14.701 |
| 10993 | SDS | serine dehydratase like | -2.322 | 1.343 |
| 113675 | SDSL | microtubule associated protein 1 light chain 3 beta 2 | -4.124 | 9.13 |
| 643246 | MAP1LC3B2 | F-box and WD repeat domain containing 8 | 0.809 | 1.515 |
| 26259 | FBXW8 | tescalcin | -0.575 | 1.62 |
| 54997 | TESC | F-box protein 21 | 1.523 | 6.825 |
| 23014 | FBXO21 | replication factor C subunit 5 | -1.127 | 5.53 |
| 5985 | RFC5 | WD repeat and SOCS box containing 2 | 1.199 | 2.295 |
| 55884 | WSB2 | V-set and immunoglobulin domain containing 10 | 0.641 | 1.825 |
| 54621 | VSIG10 | phosphatidylethanolamine binding protein 1 | 1.38 | 1.329 |
| 5037 | PEBP1 | protein kinase AMP-activated non-catalytic subunit beta 1 | -0.841 | 2.051 |
| 5564 | PRKAB1 | citron rho-interacting serine/threonine kinase | 0.719 | 3.365 |
| 11113 | CIT | BICD family like cargo adaptor 1 | 2.886 | 1.399 |
| 92558 | BICDL1 | GCN1 activator of EIF2AK4 | -1.547 | 1.495 |
| 10985 | GCN1 | sirtuin 4 | -0.346 | 1.321 |
| 23409 | SIRT4 | serine and arginine rich splicing factor 9 | 1.761 | 1.822 |
| 8683 | SRSF9 | ring finger protein 10 | 0.383 | 2.367 |
| 9921 | RNF10 | signal peptide peptidase like 3 | 1.125 | 5.219 |
| 121665 | SPPL3 | 2'-5'-oligoadenylate synthetase like | -0.433 | 1.468 |
| 8638 | OASL | purinergic receptor P2X 7 | -2.609 | 2.342 |
| 5027 | P2RX7 | purinergic receptor P2X 4 | -2.409 | 6.141 |
| 5025 | P2RX4 | calcium/calmodulin dependent protein kinase kinase 2 | -0.761 | 3.43 |
| 10645 | CAMKK2 | ring finger protein 34 | 0.749 | 8.666 |
| 80196 | RNF34 | lysine demethylase 2B | 0.474 | 1.648 |
| 84678 | KDM2B | 112268099 LOC112268099 | -1.177 | 6.689 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 144404 | TMEM120B | transmembrane protein 120B | 0.627 | 1.851 |
| 54509 | RHOF | ras homolog family member F, filopodia associated | 0.694 | 2.543 |
| 107984442 | LOC107984442 | | 1.74 | 2.332 |
| 338799 | LINC01089 | long intergenic non-protein coding RNA 1089 | 0.677 | 1.611 |
| 3242 | HPD | 4-hydroxyphenylpyruvate dioxygenase | 2.49 | 2.768 |
| 5715 | PSMD9 | proteasome 26S subunit, non-ATPase 9 | 0.655 | 3.963 |
| 605 | BCL7A | BAF chromatin remodeling complex subunit BCL7A | -2.634 | 4.775 |
| 22877 | MLXIP | MLX interacting protein | -0.68 | 1.563 |
| 55596 | ZCHC8 | zinc finger CCHC-type containing 8 | 1.3 | 2.78 |
| 65117 | RSRC2 | arginine and serine rich coiled-coil 2 | 0.942 | 1.989 |
| 9735 | KNTC1 | kinetochore associated 1 | 1.764 | 2.763 |
| 9026 | HIP1R | huntingtin interacting protein 1 related | 1.932 | 3.145 |
| 57605 | PITPNM2 | phosphatidylinositol transfer protein membrane associated 2 | 1.749 | 3.234 |
| 10198 | MPHOSPH9 | M-phase phosphoprotein 9 | 0.899 | 1.782 |
| 55206 | SBNO1 | strawberry notch homolog 1 | 0.774 | 3.473 |
| 112268105 | SBNO1-AS1 | SBNO1 antisense RNA 1 | 1.573 | 1.992 |
| 387893 | KMT5A | lysine methyltransferase 5A | 1.024 | 6.784 |
| 11066 | SNRNP35 | small nuclear ribonucleoprotein U11/U12 subunit 35 | 0.7 | 3.245 |
| 353116 | RILPL1 | Rab interacting lysosomal protein like 1 | 2.565 | 9.924 |
| 101927415 | TMED2-DT | TMED2 divergent transcript | 1.196 | 1.434 |
| 79867 | TCTN2 | tectonic family member 2 | -1.37 | 1.486 |
| 196385 | DNAH10 | dynein axonemal heavy chain 10 | 3.045 | 3.868 |
| 80212 | CCDC92 | coiled-coil domain containing 92 | -1.141 | 2.191 |
| 144348 | ZNF664 | zinc finger protein 664 | -0.956 | 3.003 |
| 9612 | NCOR2 | nuclear receptor corepressor 2 | -1.631 | 13.274 |
| 105370047 | LOC105370047 | uncharacterized LOC105370047 | -1.449 | 1.327 |
| 949 | SCARB1 | scavenger receptor class B member 1 | -2.732 | 12.642 |
| 121260 | SLC15A4 | solute carrier family 15 member 4 | 1.202 | 3.338 |
| 100128276 | LOC100128276 | uncharacterized LOC100128276 | 1.261 | 2.083 |
| 144423 | GLT1D1 | glycosyltransferase 1 domain containing 1 | 1.056 | 3.194 |
| 2054 | STX2 | syntaxin 2 | -0.637 | 1.789 |
| 283383 | ADGRD1 | adhesion G protein-coupled receptor D1 | -3.698 | 12.25 |
| 4326 | MMP17 | matrix metallopeptidase 17 | -1.878 | 3.385 |
| 8408 | ULK1 | unc-51 like autophagy activating kinase 1 | 1.122 | 3.322 |
| 80324 | PUS1 | pseudouridine synthase 1 | -0.817 | 2.48 |
| 100996246 | LINC02361 | long intergenic non-protein coding RNA 2361 | -1.398 | 1.432 |
| 100129528 | MUC8 | mucin 8 | -2.171 | 2.819 |
| 57666 | FBRSL1 | fibrosin like 1 | -0.57 | 1.4 |
| 5426 | POLE | DNA polymerase epsilon, catalytic subunit | 2.05 | 4.749 |
| 5827 | PXMP2 | peroxisomal membrane protein 2 | 2.003 | 3.106 |
| 192111 | PGAM5 | PGAM family member 5, mitochondrial serine/threonine protein phosphatase | -0.532 | 1.667 |
| 23141 | ANKLE2 | ankyrin repeat and LEM domain containing 2 | 0.401 | 1.947 |
| 9205 | ZMYM5 | zinc finger MYM-type containing 5 | 0.75 | 1.878 |
| 10804 | GJB6 | gap junction protein beta 6 | 5.378 | 10.197 |
| 51084 | CRYL1 | crystallin lambda 1 | -1.628 | 5.381 |
| 64328 | XPO4 | exportin 4 | -0.606 | 2.069 |
| 221150 | SKA3 | spindle and kinetochore associated complex subunit 3 | 3.194 | 3.351 |
| 100652865 | LINC00539 | long intergenic non-protein coding RNA 539 | 1.923 | 1.669 |
| 2871 | GRK6P1 | G protein-coupled receptor kinase 6 pseudogene 1 | 1.526 | 1.65 |
| 55504 | TNFRSF19 | TNF receptor superfamily member 19 | 2.279 | 1.452 |
| 55835 | CENPJ | centromere protein J | 1.228 | 2.24 |
| 5042 | PABPC3 | poly(A) binding protein cytoplasmic 3 | -0.649 | 1.309 |
| 1024 | CDK8 | cyclin dependent kinase 8 | -0.593 | 1.392 |
| 219402 | MTIF3 | mitochondrial translational initiation factor 3 | 0.376 | 1.301 |
| 283537 | SLC46A3 | solute carrier family 46 member 3 | -1.502 | 7.697 |
| 84056 | KATNAL1 | katanin catalytic subunit A1 like 1 | 1.383 | 2.223 |
| 3146 | HMGB1 | high mobility group box 1 | 0.849 | 4.147 |
| 241 | ALOX5AP | arachidonate 5-lipoxygenase activating protein | 3.161 | 6.913 |
| 100874158 | LINC00398 | long intergenic non-protein coding RNA 398 | 3.909 | 4.657 |
| 10808 | HSPH1 | heat shock protein family H (Hsp110) member 1 | -1.425 | 4.2 |
| 145173 | B3GLCT | beta 3-glucosyltransferase | 1.188 | 1.704 |
| 675 | BRCA2 | BRCA2 DNA repair associated | 1.571 | 1.625 |
| 90634 | N4BP2L1 | NEDD4 binding protein 2 like 1 | -1.302 | 5.008 |
| 26960 | NBEA | neurobeachin | -1.673 | 1.596 |
| 8900 | CCNA1 | cyclin A1 | 3.643 | 3.834 |
| 122011 | CSNK1A1L | casein kinase 1 alpha 1 like | 3.156 | 3.409 |
| 105377814 | LOC105377814 | uncharacterized LOC105377814 | 3.431 | 2.46 |
| 10166 | SLC25A15 | solute carrier family 25 member 15 | -1.327 | 2.575 |
| 11193 | WBP4 | WW domain binding protein 4 | 1.165 | 5.221 |
| 89890 | KBTBD6 | kelch repeat and BTB domain containing 6 | 3.893 | 7.239 |
| 101929140 | LOC101929140 | uncharacterized LOC101929140 | 2.344 | 2.853 |
| 84078 | KBTBD7 | kelch repeat and BTB domain containing 7 | 2.618 | 4.065 |
| 9617 | MTRF1 | mitochondrial translation release factor 1 | 0.949 | 2.844 |
| 79612 | NAA16 | N-alpha-acetyltransferase 16, NatA auxiliary subunit | 0.894 | 1.487 |
| 28984 | RGCC | regulator of cell cycle | 1.802 | 2.165 |
| 11215 | AKAP11 | A-kinase anchoring protein 11 | -0.9 | 3.944 |
| 94240 | EPSTI1 | epithelial stromal interaction 1 | -2.943 | 2.871 |
| 144811 | LACC1 | laccase domain containing 1 | -0.569 | 1.963 |
| 8848 | TSC22D1 | TSC22 domain family member 1 | -1.481 | 3.404 |
| 641467 | TSC22D1-AS1 | TSC22D1 antisense RNA 1 | -1.331 | 1.639 |
| 100190939 | TPT1-AS1 | TPT1 antisense RNA 1 | 0.985 | 3.825 |
| 23091 | ZC3H13 | zinc finger CCCH-type containing 13 | -0.521 | 1.317 |
| 220416 | LRRC63 | leucine rich repeat containing 63 | 1.637 | 1.567 |
| 5925 | RB1 | RB transcriptional corepressor 1 | -0.775 | 2.552 |
| 10161 | LPAR6 | lysophosphatidic acid receptor 6 | -2.719 | 10.723 |
| 1102 | RCBTB2 | RCC1 and BTB domain containing protein 2 | -1.555 | 7.483 |
| 57105 | CYSLTR2 | cysteinyl leukotriene receptor 2 | -3.352 | 5.817 |
| 2862 | MLNR | motilin receptor | 2.886 | 1.752 |
| 105370203 | LOC105370203 | uncharacterized LOC105370203 | 2.66 | 5.023 |
| 81602 | CDADC1 | cytidine and dCMP deaminase domain containing 1 | 2.116 | 8.631 |
| 107303344 | SETDB2-PHF11 | SETDB2-PHF11 readthrough | -0.75 | 1.331 |
| 51131 | PHF11 | PHD finger protein 11 | -0.817 | 1.492 |
| 84650 | EBPL | EBP like | 1.019 | 3.213 |
| 3839 | KPNA3 | karyopherin subunit alpha 3 | -0.394 | 1.486 |
| 8847 | DLEU2 | deleted in lymphocytic leukemia 2 | 0.477 | 1.313 |
| 10206 | TRIM13 | tripartite motif containing 13 | 1.072 | 2.796 |
| 220107 | DLEU7 | deleted in lymphocytic leukemia 7 | -0.903 | 1.431 |
| 26512 | INTS6 | integrator complex subunit 6 | 0.777 | 2.415 |
| 100507398 | INTS6-AS1 | INTS6 antisense RNA 1 | 1.449 | 3.088 |
| 4752 | NEK3 | NIK/MAP3K5 related kinase 3 | -0.702 | 1.317 |
| 26586 | CKAP2 | cytoskeleton associated protein 2 | 1.164 | 2.408 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 10562 | OLFM4 | olfactomedin 4 | 3.645 | 1.411 |
| 81624 | DIAPH3 | diaphanous related formin 3 | 2.772 | 2.393 |
| 81550 | TDRD3 | tudor domain containing 3 | -0.821 | 2.698 |
| 5101 | PCDH9 | protocadherin 9 | -2.033 | 1.633 |
| 1602 | DACH1 | dachshund family transcription factor 1 | 3.241 | 6.044 |
| 688 | KLF5 | KLF transcription factor 5 | 3.911 | 5.88 |
| 11278 | KLF12 | KLF transcription factor 12 | -4.966 | 17.869 |
| 9882 | TBC1D4 | TBC1 domain family member 4 | -3.673 | 12.047 |
| 170622 | COMM6 | COMM domain containing 6 | 0.486 | 1.315 |
| 4008 | LMO7 | LIM domain 7 | -1.076 | 1.961 |
| 115207 | KCTD12 | potassium channel tetramerization domain containing 12 | -1.936 | 12.512 |
| 26224 | FBXL3 | F-box and leucine rich repeat protein 3 | 1.103 | 2.801 |
| 23077 | MYCBP2 | MYC binding protein 2 | -0.824 | 4.933 |
| 100874212 | MYCBP2-AS1 | MYCBP2 antisense RNA 1 | -0.866 | 2.192 |
| 122060 | SLAIN1 | SLAIN motif family member 1 | 1.746 | 3.539 |
| 10253 | SPRY2 | sprouty RTK signaling antagonist 2 | 2.592 | 3.511 |
| 407975 | MIR17HG | miR-17-92a-1 cluster host gene | 1.4 | 1.454 |
| 100289274 | DNAJC3-DT | DNAJC3 divergent transcript | 2.297 | 5.332 |
| 5611 | DNAJC3 | Dnaj heat shock protein family (Hsp40) member C3 | 0.768 | 5.395 |
| 10150 | MBNL2 | muscleblind like splicing regulator 2 | -2.684 | 6.485 |
| 101927385 | LOC101927385 | uncharacterized LOC101927385 | -2.086 | 1.561 |
| 5911 | RAP2A | RAP2A, member of RAS oncogene family | -1.622 | 14.386 |
| 10160 | FARP1 | FERM, ARH/RhoGEF and pleckstrin domain protein 1 | -0.499 | 2.719 |
| 8428 | STK24 | serine/threonine kinase 24 | -0.569 | 3.766 |
| 337867 | UBAC2 | UBA domain containing 2 | -1.075 | 6.232 |
| 2841 | GPR18 | G protein-coupled receptor 18 | -1.485 | 1.634 |
| 9375 | TM9SF2 | transmembrane 9 superfamily member 2 | 0.331 | 1.359 |
| 5095 | PCCA | propionyl-CoA carboxylase subunit alpha | -3.045 | 8.698 |
| 87769 | GGACT | gamma-glutamylamine cyclotransferase | -2.028 | 5.633 |
| 84899 | TMTC4 | transmembrane O-mannosyltransferase targeting cadherins 4 | -1.303 | 5.823 |
| 93081 | TEX30 | testis expressed 30 | 1.062 | 2.016 |
| 55082 | ARGLU1 | arginine and glutamate rich 1 | 0.528 | 1.761 |
| 84945 | ABHD13 | abhydrolase domain containing 13 | 0.58 | 1.428 |
| 10673 | TNFSF13B | TNF superfamily member 13b | -1.754 | 4.29 |
| 8660 | IRS2 | insulin receptor substrate 2 | 1.641 | 8.737 |
| 55647 | RAB20 | RAB20, member RAS oncogene family | -1.597 | 3.175 |
| 55739 | NAXD | NAD(P)HX dehydratase | -1.575 | 6.353 |
| 3621 | ING1 | inhibitor of growth family member 1 | -0.566 | 1.46 |
| 55795 | PCID2 | PCI domain containing 2 | -0.481 | 1.588 |
| 55002 | TMC03 | transmembrane and coiled-coil domains 3 | 0.951 | 3.484 |
| 7027 | TFDP1 | transcription factor Dp-1 | 1.49 | 7.711 |
| 6011 | GRK1 | G protein-coupled receptor kinase 1 | 3.399 | 2.775 |
| 650669 | GAS6-AS1 | GAS6 antisense RNA 1 | -1.781 | 3.068 |
| 2621 | GAS6 | growth arrest specific 6 | -1.536 | 3.001 |
| 105377806 | LOC105377806 | chromosome 13 open reading frame 46 | -2.633 | 5.257 |
| 100507747 | C13orf46 | RAS p21 protein activator 3 | -2.232 | 3.696 |
| 22821 | RASA3 | cell division cycle 16 | -0.88 | 3.119 |
| 107984593 | LOC107984593 | tetratricopeptide repeat domain 5 | -2.276 | 2.488 |
| 8881 | CDC16 | poly(ADP-ribose) polymerase 2 | -0.589 | 1.367 |
| 91875 | TTC5 | telomerase associated protein 1 | -0.549 | 1.541 |
| 10038 | PARP2 | phosphatidylinositol-4,5-bisphosphate 4-phosphatase 1 | 0.733 | 1.507 |
| 7011 | TEP1 | ribonuclease A family member k6 | -1.022 | 3.965 |
| 90809 | PIP4P1 | ribonuclease A family member 2C, pseudogene | 0.929 | 2.768 |
| 283 | ANG | ribonuclease A family member 2 | -1.231 | 1.331 |
| 6039 | RNASE6 | NDRG family member 2 | -2.399 | 12.853 |
| 643332 | RNASE2CP | Rho guanine nucleotide exchange factor 40 | 1.993 | 3.522 |
| 6036 | RNASE2 | RPGR interacting protein 1 | 2.44 | 3.159 |
| 57447 | NDRG2 | RAB2B, member RAS oncogene family | -3.573 | 7.189 |
| 55701 | ARHGEF40 | TOX high mobility group box family member 4 | -1.516 | 2.938 |
| 57096 | RPGRIPI1 | methyltransferase 3, N6-adenosine-methyltransferase complex catalytic subunit | -1.702 | 3.153 |
| 84932 | RAB2B | T cell receptor delta constant | 0.661 | 2.173 |
| 9878 | TOX4 | T cell receptor alpha constant | 0.528 | 3.541 |
| 56339 | METTL3 | solute carrier family 7 member 7 | 0.523 | 2.137 |
| 28526 | TRDC | matrix metallopeptidase 14 | -3.504 | 3.213 |
| 28755 | TRAC | LDL receptor related protein 10 | -3.288 | 1.384 |
| 9056 | SLC7A7 | RRAD and GEM like GTPase 2 | -2.207 | 7.067 |
| 4323 | MMP14 | protein arginine methyltransferase 4 | -1.548 | 2.11 |
| 26020 | LRP10 | matrix metallopeptidase 14 | 1.199 | 5.313 |
| 161253 | REM2 | methylenetetrahydrofolate reductase | 1.801 | 4.43 |
| 100505758 | PRMT5-AS1 | RRAD and GEM like GTPase 2 | -1.119 | 2.494 |
| 10419 | PRMT5 | PRMT5 antisense RNA 1 | -1.025 | 4.281 |
| 64403 | CDH24 | protein arginine methyltransferase 5 | 2.264 | 2.979 |
| 22985 | ACIN1 | cadherin 24 | 0.47 | 2.003 |
| 1053 | CEBPE | apoptotic chromatin condensation inducer 1 | 0.396 | 2.064 |
| 23428 | SLC7A8 | CCAAT enhancer binding protein epsilon | 2.868 | 2.921 |
| 90673 | PPP1R3E | solute carrier family 7 member 8 | 1.759 | 5.102 |
| 8906 | AP1G2 | protein phosphatase 1 regulatory subunit 3E | 0.603 | 1.427 |
| 84502 | JPH4 | adaptor related protein complex 1 subunit gamma 2 | 0.47 | 2.003 |
| 55449 | DHRS4-AS1 | junctophilin 4 | -2.969 | 9.131 |
| 10901 | DHRS4 | DHRS4 antisense RNA 1 | -1.154 | 2.698 |
| 317749 | DHRS4L2 | dehydrogenase/reductase 4 | -1.561 | 5.776 |
| 728635 | DHRS4L1 | dehydrogenase/reductase 4 like 2 | -1.436 | 5.275 |
| 90668 | CARMIL3 | dehydrogenase/reductase 4 like 1 (pseudogene) | -2.063 | 8.036 |
| 4901 | NRL | capping protein regulator and myosin 1 linker 3 | -2.046 | 1.775 |
| 5106 | PCK2 | neural retina leucine zipper | -0.967 | 2.325 |
| 5720 | PSME1 | phosphoenolpyruvate carboxykinase 2, mitochondrial | -2.68 | 18.203 |
| 5721 | PSME2 | proteasome activator subunit 1 | -1.057 | 3.65 |
| 102465801 | MIR7703 | proteasome activator subunit 2 | -2.094 | 10.235 |
| 29082 | CHMP4A | microRNA 7703 | -2.304 | 8.364 |
| 7051 | TGM1 | charged multivesicular body protein 4A | -0.442 | 1.667 |
| 5875 | RABGGTA | transglutaminase 1 | -1.176 | 1.639 |
| 115817 | DHRS1 | Rab geranylgeranyltransferase subunit alpha | -0.82 | 3.135 |
| 161424 | NOP9 | dehydrogenase/reductase 1 | 0.644 | 2.562 |
| 1241 | LTB4R | NOP9 nucleolar protein | -0.349 | 1.492 |
| 196883 | ADCY4 | leukotriene B4 receptor | 0.919 | 9.985 |
| 57523 | NYNRIN | adenylate cyclase 4 | 1.543 | 6.122 |
| 643866 | CBLN3 | NYN domain and retroviral integrase containing | -2.368 | 2.458 |
| 1511 | CTSG | cerebellin 3 precursor | -2.614 | 6.556 |
| 29966 | STRN3 | cathepsin G | 3.37 | 2.153 |
| 25938 | HEATR5A | striatin 3 | 0.505 | 2.163 |
| 112487 | DTD2 | HEAT repeat containing 5A | 0.51 | 1.68 |
| | | D-aminoacyl-tRNA deacylase 2 | -1.71 | 5.363 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|---------------|---|----------|----------|
| 80224 | NUBPL | NUBP iron-sulfur cluster assembly factor, mitochondrial | -1.338 | 2.288 |
| 101954275 | RNU6-7 | RNA, U6 small nuclear 7 | 1.641 | 1.399 |
| 101954278 | RNU6-8 | RNA, U6 small nuclear 8 | 2.321 | 2.596 |
| 171546 | SPTSSA | serine palmitoyltransferase small subunit A | -0.583 | 1.578 |
| 55837 | EAPP | E2F associated phosphoprotein | 0.571 | 1.496 |
| 11177 | BAZ1A | bromodomain adjacent to zinc finger domain 1A | 0.805 | 2.185 |
| 112268124 | BAZ1A-AS1 | BAZ1A antisense RNA 1 | 1.281 | 4.339 |
| 100506157 | SRP54-AS1 | SRP54 antisense RNA 1 | 1.819 | 4.551 |
| 6729 | SRP54 | signal recognition particle 54 | 0.545 | 1.674 |
| 283635 | FAM177A1 | family with sequence similarity 177 member A1 | 1.349 | 8.514 |
| 101927178 | LOC101927178 | uncharacterized LOC101927178 | 0.649 | 1.49 |
| 9692 | PRORP | protein only RNase P catalytic subunit | 0.685 | 3.138 |
| 253959 | RALGAP1 | Ral GTPase activating protein catalytic subunit alpha 1 | -0.627 | 2.178 |
| 84312 | BRMS1L | BRMS1 like transcriptional repressor | -0.989 | 1.555 |
| 283547 | LINC00639 | long intergenic non-protein coding RNA 639 | 3.127 | 3.67 |
| 122553 | TRAPPC6B | trafficking protein particle complex subunit 6B | 1.104 | 3.784 |
| 5411 | PNN | pinin, desmosome associated protein | 0.832 | 3.188 |
| 54813 | KLHL28 | kelch like family member 28 | 0.689 | 1.553 |
| 6235 | RPS29 | ribosomal protein S29 | -0.639 | 3.088 |
| 107987206 | LOC107987206 | replaced by ID 6029 | 1.573 | 2.9 |
| 6029 | RN7SL1 | RNA component of signal recognition particle 7SL1 | 1.573 | 2.9 |
| 122769 | LRR1 | leucine rich repeat protein 1 | 1.137 | 2.058 |
| 5427 | POLE2 | DNA polymerase epsilon 2, accessory subunit | 2.696 | 2.508 |
| 378707 | RN7SL3 | RNA component of signal recognition particle 7SL3 | 2.303 | 3.241 |
| 105378179 | LOC105378179 | uncharacterized LOC105378179 | 1.397 | 3.029 |
| 378706 | RN7SL2 | RNA component of signal recognition particle 7SL2 | 1.401 | 3.036 |
| 283551 | LINC01588 | long intergenic non-protein coding RNA 1588 | -2.409 | 3.799 |
| 196913 | LINC01599 | long intergenic non-protein coding RNA 1599 | -2.594 | 2.68 |
| 6655 | SOS2 | SOS Ras/Rho guanine nucleotide exchange factor 2 | 1.148 | 14.368 |
| 11183 | MAP4K5 | mitogen-activated protein kinase kinase kinase kinase 5 | -0.575 | 1.604 |
| 60485 | SAV1 | salvador family WW domain containing protein 1 | -1.064 | 3.666 |
| 105370491 | LOC105370491 | abhydrolase domain containing 12B | 2.19 | 2.799 |
| 145447 | ABHD12B | glycogen phosphorylase L | 2.311 | 7.465 |
| 5836 | PYGL | | 2.17 | 16.595 |
| 105370492 | LOC105370492 | uncharacterized LOC400212 | 3.051 | 8.673 |
| 400212 | LOC400212 | uncharacterized LOC102723604 | 3.744 | 4.687 |
| 102723604 | LOC102723604 | thioredoxin domain containing 16 | 2.541 | 3.084 |
| 57544 | TXND16 | endoplasmic reticulum oxidoreductase 1 alpha | -1.239 | 4.163 |
| 30001 | ERO1A | glucosamine-phosphate N-acetyltransferase 1 | 1.017 | 4.699 |
| 64841 | GPNAT1 | DDHD domain containing 1 | -1.057 | 3.315 |
| 80821 | DDHD1 | cyclin dependent kinase inhibitor 3 | -2.021 | 27.717 |
| 1033 | CDKN3 | glia maturation factor beta | 3.229 | 4.582 |
| 2764 | GMFB | sterile alpha motif domain containing 4A | 0.796 | 1.74 |
| 23034 | SAMD4A | SAMD4A antisense RNA 1 | -5.186 | 18.654 |
| 729451 | SAMD4A-AS1 | GTP cyclohydrolase 1 | -3.021 | 1.957 |
| 2643 | GCH1 | WD repeat and HMG-box DNA binding protein 1 | -1.308 | 5.02 |
| 11169 | WDHD1 | suppressor of cytokine signaling 4 | 1.842 | 1.858 |
| 122809 | SOCS4 | kinectin 1 | 0.48 | 1.354 |
| 3895 | KTN1 | PSMA3 antisense RNA 1 | -0.77 | 5.383 |
| 379025 | PSMA3-AS1 | translocase of inner mitochondrial membrane 9 | 0.551 | 1.788 |
| 26520 | TIMM9 | G protein-coupled receptor 135 | -0.875 | 2.254 |
| 64582 | GPR135 | trans-L-3-hydroxyproline dehydratase | -1.896 | 6.083 |
| 112849 | L3HYPDH | reticulon 1 | -1.594 | 3.745 |
| 6252 | RTN1 | dehydrogenase/reductase 7 | -3.323 | 14.106 |
| 51635 | DHRS7 | protein phosphatase, Mg2+/Mn2+ dependent 1A | 0.84 | 3.687 |
| 5494 | PPM1A | MNAT1 component of CDK activating kinase | 1.004 | 7.409 |
| 4331 | MNAT1 | solute carrier family 38 member 6 | 1.36 | 2.436 |
| 145389 | SLC38A6 | protein kinase C eta | -0.97 | 2.391 |
| 5583 | PRKCH | uncharacterized LOC105370525 | -1.692 | 2.41 |
| 105370525 | LOC105370525 | HIF1A antisense RNA 2 | -2.14 | 3.108 |
| 100750247 | HIF1A-AS2 | WD repeat domain 89 | 0.714 | 1.381 |
| 112840 | WDR89 | sphingosine-1-phosphate phosphatase 1 | -1.101 | 2.155 |
| 81537 | SGPP1 | spectrin repeat containing nuclear envelope protein 2 | -2.053 | 12.34 |
| 23224 | SYNE2 | estrogen receptor 2 | 1.796 | 3.282 |
| 2100 | ESR2 | zinc finger and BTB domain containing 25 | 1.903 | 2.191 |
| 7597 | ZBTB25 | pleckstrin homology and RhoGEF domain containing G3 | -1.135 | 4.141 |
| 26030 | PLEKHG3 | spectrin beta, erythrocytic | 1.822 | 12.329 |
| 6710 | SPTB | MYC associated factor X | 1.659 | 7.465 |
| 4149 | MAX | uncharacterized LOC100506321 | 0.767 | 3.618 |
| 100506321 | LOC100506321 | uncharacterized LOC105370542 | 0.801 | 3.154 |
| 105370542 | LOC105370542 | uncharacterized LOC105370542 | -3.852 | 2.972 |
| 161145 | TMEM229B | transmembrane protein 229B | -2.889 | 9.04 |
| 384 | ARG2 | arginase 2 | -0.824 | 5.788 |
| 10490 | VT1B | vesicle transport through interaction with t-SNAREs 1B | -0.789 | 8.38 |
| 51109 | RDH11 | retinol dehydrogenase 11 | -1.503 | 14.004 |
| 5890 | RAD51B | RAD51 paralog B | 0.838 | 1.957 |
| 677 | ZFP36L1 | ZFP36 ring finger protein like 1 | -1.525 | 4.252 |
| 87 | ACTN1 | actinin alpha 1 | 1.876 | 5.378 |
| 161159 | ACTN1-DT | ACTN1 divergent transcript | 2.851 | 4.642 |
| 8816 | DCAF5 | DDB1 and CUL4 associated factor 5 | -0.416 | 2.542 |
| 100529257 | SYNJ2BP-COX16 | SYNJ2BP-COX16 readthrough | -1.599 | 7.398 |
| 51241 | COX16 | cytochrome c oxidase assembly factor COX16 | -1.39 | 5.964 |
| 55333 | SYNJ2BP | synaptjanin 2 binding protein | -1.984 | 7.121 |
| 22990 | PCNX1 | pecanex 1 | 0.66 | 1.499 |
| 26037 | SIPA1L1 | signal induced proliferation associated 1 like 1 | -0.728 | 1.969 |
| 26094 | DCAF4 | DDB1 and CUL4 associated factor 4 | -1.013 | 2.221 |
| 53349 | ZFYVE1 | zinc finger FYVE-type containing 1 | 0.738 | 5.422 |
| 91748 | MIDEAS | mitotic deacetylase associated SANT domain protein | -0.694 | 1.48 |
| 145482 | PTGR2 | prostaglandin reductase 2 | -1.31 | 2.083 |
| 57862 | ZNF410 | zinc finger protein 410 | 0.83 | 3.117 |
| 646658 | SYNDIG1L | synapse differentiation inducing 1 like | -2.61 | 2.499 |
| 10577 | NPC2 | NPC intracellular cholesterol transporter 2 | -1.228 | 8.75 |
| 100616211 | MIR4709 | microRNA 4709 | -1.139 | 7.059 |
| 27030 | MLH3 | mutL homolog 3 | -2.069 | 5.606 |
| 97 | ACYP1 | acylphosphatase 1 | 1.292 | 1.502 |
| 10972 | TMED10 | transmembrane p24 trafficking protein 10 | -0.767 | 5.851 |
| 2353 | FOS | Fos proto-oncogene, AP-1 transcription factor subunit | -1.586 | 3.342 |
| 101928377 | JDP2-AS1 | JDP2 antisense RNA 1 | 1.311 | 6.442 |
| 122953 | JDP2 | Jun dimerization protein 2 | 0.66 | 1.66 |
| 10538 | BATF | basic leucine zipper ATF-like transcription factor | 1.165 | 4.991 |
| 102724153 | FLVCR2-AS1 | FLVCR2 antisense RNA 1 | -1.085 | 1.915 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 55640 | FLVCR2 | FLVCR heme transporter 2 | -1.067 | 2.843 |
| 11161 | ERG28 | ergosterol biosynthesis 28 homolog | 1.699 | 9.147 |
| 112752 | IFT43 | intraflagellar transport 43 | -2.719 | 6.889 |
| 55668 | GPATCH2L | G-patch domain containing 2 like | -0.425 | 2.534 |
| 22846 | VASH1 | vasohibin 1 | -3.034 | 7.338 |
| 100506603 | VASH1-AS1 | VASH1 antisense RNA 1 | -2.497 | 7.046 |
| 23357 | ANGEL1 | angel homolog 1 | -1.656 | 9 |
| 64207 | IRF2BPL | interferon regulatory factor 2 binding protein like | -0.741 | 1.581 |
| 107984638 | LOC107984638 | arf-GAP with GTPase, ANK repeat and PH domain-containing protein 2 | -0.852 | 1.836 |
| 57156 | TMEM63C | transmembrane protein 63C | -2.639 | 2.958 |
| 283578 | TMED8 | transmembrane p24 trafficking protein family member 8 | 0.593 | 2.107 |
| 10598 | AHSA1 | activator of HSP90 ATPase activity 1 | -0.356 | 1.481 |
| 9517 | SPTLC2 | serine palmitoyltransferase long chain base subunit 2 | -0.697 | 1.694 |
| 57143 | ADCK1 | aarF domain containing kinase 1 | -1.825 | 5.143 |
| 145508 | CEP128 | centrosomal protein 128 | 1.567 | 7.496 |
| 101928462 | LOC101928462 | uncharacterized LOC101928462 | 1.502 | 1.65 |
| 85439 | STON2 | stonin 2 | -1.995 | 4.593 |
| 101928767 | LINC02328 | long intergenic non-protein coding RNA 2328 | -1.459 | 1.536 |
| 123016 | TTC8 | tetratricopeptide repeat domain 8 | 1.554 | 3.025 |
| 1112 | FOXN3 | forkhead box N3 | -0.605 | 2.131 |
| 90141 | EFCAB11 | EF-hand calcium binding domain 11 | 1.2 | 2.019 |
| 55775 | TDP1 | tyrosyl-DNA phosphodiesterase 1 | 0.771 | 2.032 |
| 56659 | KCNK13 | potassium two pore domain channel subfamily K member 13 | -2.584 | 3.841 |
| 5700 | PSMC1 | proteasome 26S subunit, ATPase 1 | 0.372 | 1.6 |
| 55051 | NRDE2 | NRDE-2, necessary for RNA interference, domain containing | 0.508 | 2.898 |
| 801 | CALM1 | calmodulin 1 | 1.556 | 6.422 |
| 145567 | TTC7B | tetratricopeptide repeat domain 7B | 1.727 | 3.562 |
| 101928909 | TTC7B-AS1 | TTC7B antisense RNA 1 | 2.006 | 3.104 |
| 80017 | DGLUCY | D-glutamate cyclase | -1.133 | 7.081 |
| 440193 | CCDC88C | coiled-coil domain containing 88C | -0.569 | 1.982 |
| 105370624 | LOC105370624 | uncharacterized LOC105370624 | 0.949 | 3.294 |
| 123036 | TC2N | tandem C2 domains, nuclear | -2.15 | 2.12 |
| 10516 | FBLN5 | fibulin 5 | 2.39 | 1.49 |
| 4707 | NDUFB1 | NADH:ubiquinone oxidoreductase subunit B1 | 0.396 | 1.331 |
| 123041 | SLC24A4 | solute carrier family 24 member 4 | -1.493 | 4.833 |
| 5641 | LGMN | legumain | -1.308 | 2.462 |
| 9950 | GOLGA5 | golgin A5 | -0.441 | 1.407 |
| 3705 | ITPK1 | inositol-tetrakisphosphate 1-kinase | -0.706 | 1.66 |
| 26175 | LYSET | lysosomal enzyme trafficking factor | -0.747 | 2.608 |
| 51676 | ASB2 | ankyrin repeat and SOCS box containing 2 | -2.906 | 2.835 |
| 57062 | DDX24 | DEAD-box helicase 24 | -0.765 | 1.427 |
| 3429 | IFI27 | interferon alpha inducible protein 27 | -10.36 | 7.671 |
| 83982 | IFI27L2 | interferon alpha inducible protein 27 like 2 | -1.42 | 3.687 |
| 5265 | SERPINA1 | serpin family A member 1 | -0.966 | 2.642 |
| 400242 | DICER1-AS1 | DICER1 antisense RNA 1 | 0.975 | 1.453 |
| 79789 | CLMN | calmin | -2.328 | 6.587 |
| 161176 | SYNE3 | spectrin repeat containing nuclear envelope family member 3 | -0.604 | 1.701 |
| 101929107 | LOC101929107 | uncharacterized LOC101929107 | -1.477 | 2.282 |
| 283596 | SNHG10 | small nucleolar RNA host gene 10 | 0.856 | 1.616 |
| 8115 | TCL1A | TCL1 family AKT coactivator A | -6.898 | 6.802 |
| 51527 | GSKIP | GSK3B interacting protein | 1.402 | 5.965 |
| 7443 | VRK1 | VRK serine/threonine kinase 1 | 1.903 | 5.475 |
| 64919 | BCL11B | BCL11 transcription factor B | -4.216 | 1.768 |
| 51466 | EVL | Enah/Vasp-like | -2.961 | 30.897 |
| 123099 | DEGS2 | delta 4-desaturase, sphingolipid 2 | -2.62 | 10.998 |
| 7453 | WARS1 | tryptophanyl-tRNA synthetase 1 | -2.367 | 16.449 |
| 57596 | BEGAIN | brain enriched guanylate kinase associated | 3.024 | 10.633 |
| 105370668 | LOC105370668 | uncharacterized LOC105370668 | -2.636 | 3.457 |
| 107984698 | LOC107984698 | long intergenic non-protein coding RNA 230 | 3.334 | 3.277 |
| 105370676 | LOC105370676 | long intergenic non-protein coding RNA 239 | 4.201 | 3.62 |
| 145200 | LINC00239 | uncharacterized LOC107984658 | 3.418 | 3.599 |
| 107984658 | LOC107984658 | dynein cytoplasmic 1 heavy chain 1 | 0.961 | 3.379 |
| 1778 | DYNC1H1 | uncharacterized LOC107984661 | -0.868 | 7.338 |
| 107984661 | LOC107984661 | zinc finger protein 839 | -0.692 | 2.731 |
| 55778 | ZNF839 | tectonin beta-propeller repeat containing 2 | 0.942 | 6.677 |
| 9895 | TECPR2 | REST corepressor 1 | 1.091 | 3.715 |
| 23186 | RCOR1 | amnion associated transmembrane protein | 1.276 | 7.992 |
| 81693 | AMN | CDC42 binding protein kinase beta | -2.777 | 14.745 |
| 9578 | CDC42BPB | TNF alpha induced protein 2 | -3.329 | 18.356 |
| 7127 | TNFAIP2 | uncharacterized LOC105370687 | -1.393 | 2.666 |
| 105370687 | LOC105370687 | eukaryotic translation initiation factor 5 | 0.684 | 1.38 |
| 1983 | EIF5 | small nucleolar RNA, H/ACA box 28 | 0.793 | 1.852 |
| 677811 | SNORA28 | creatine kinase B | 0.902 | 1.322 |
| 1152 | CKB | tRNA methyltransferase 61A | -2.176 | 2.496 |
| 115708 | TRMT61A | X-ray repair cross complementing 3 | -1.253 | 2.421 |
| 7517 | XRCC3 | zinc finger FYVE-type containing 21 | 0.582 | 1.486 |
| 79038 | ZFYVE21 | ATP synthase membrane subunit j | -0.6 | 1.433 |
| 9556 | ATP5MJ | tudor domain containing 9 | 0.587 | 2.665 |
| 122402 | TDRD9 | inverted formin 2 | 2.461 | 4.833 |
| 64423 | INF2 | adenylosuccinate synthase 1 | -2.008 | 10.926 |
| 122622 | ADSS1 | uncharacterized LOC102723342 | -1.272 | 1.408 |
| 207 | AKT1 | AKT serine/threonine kinase 1 | -0.487 | 1.356 |
| 100128927 | ZBTB42 | zinc finger and BTB domain containing 42 | -0.513 | 1.535 |
| 122618 | PLD4 | phospholipase D family member 4 | -2.192 | 6.312 |
| 113146 | AHNAK2 | AHNAK nucleoprotein 2 | -7.928 | 31.32 |
| 55038 | CDCA4 | cell division cycle associated 4 | -5.367 | 5.195 |
| 29933 | GPR132 | G protein-coupled receptor 132 | 1.172 | 2.386 |
| 3714 | JAG2 | jagged canonical Notch ligand 2 | -0.702 | 1.543 |
| 256281 | NUDT14 | nudix hydrolase 14 | -1.976 | 1.852 |
| 2972 | BRF1 | BRF1 RNA polymerase III transcription initiation factor subunit | -2.098 | 9.458 |
| 90135 | BTBD6 | BTB domain containing 6 | -0.837 | 2.284 |
| 23241 | PACS2 | phosphofurin acidic cluster sorting protein 2 | 0.51 | 1.431 |
| 9112 | MTA1 | metastasis associated 1 | -0.89 | 4.122 |
| 3494 | IGHA2 | immunoglobulin heavy constant alpha 2 (A2m marker) | -0.936 | 4.774 |
| 3503 | IGHG4 | immunoglobulin heavy constant gamma 4 (G4m marker) | -2.693 | 1.896 |
| 3505 | IGHGP | immunoglobulin heavy constant gamma P (non-functional) | -2.279 | 1.833 |
| 3493 | IGHA1 | immunoglobulin heavy constant alpha 1 | -2.484 | 3.375 |
| 3500 | IGHG1 | immunoglobulin heavy constant gamma 1 (G1m marker) | -1.748 | 1.497 |
| 3502 | IGHG3 | immunoglobulin heavy constant gamma 3 (G3m marker) | -2.082 | 2.566 |
| 3495 | IGHD | immunoglobulin heavy constant delta | -2.015 | 2.687 |
| | | | -5.071 | 6.249 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|----------------|--|----------|----------|
| 3507 | IGHM | immunoglobulin heavy constant mu | -4.52 | 11.135 |
| 28477 | IGHJ4 | immunoglobulin heavy joining 4 | -3.624 | 3.742 |
| 9834 | FAM30A | family with sequence similarity 30 member A | -2.388 | 1.52 |
| 28442 | IGHV3-23 | immunoglobulin heavy variable 3-23 | -2.631 | 2.678 |
| 28439 | IGHV3-30 | immunoglobulin heavy variable 3-30 | -2.345 | 1.772 |
| 28434 | IGHV3-33 | immunoglobulin heavy variable 3-33 | -2.926 | 2.745 |
| 28388 | IGHV5-51 | immunoglobulin heavy variable 5-51 | -3.229 | 3.094 |
| 646214 | LOC464214 | p21 (RAC1) activated kinase 2 pseudogene | 1.644 | 1.586 |
| 646396 | REREP3 | arginine-glutamic acid dipeptide repeats pseudogene 3 | -4.308 | 5.118 |
| 283796 | GOLGA8IP | golgin A8 family member I, pseudogene | 1.903 | 1.45 |
| 339005 | WHAMMP3 | WHAMMP pseudogene 3 | 1.47 | 2.278 |
| 123606 | NIPA1 | NIPA magnesium transporter 1 | -1.471 | 1.344 |
| 23191 | CYFIP1 | cytoplasmic FMR1 interacting protein 1 | -1.858 | 9.348 |
| 653061 | GOLGA8S | golgin A8 family member S | 1.515 | 2.489 |
| 8123 | PWAR5 | Prader Willi/Angelman region RNA 5 | -1.656 | 1.439 |
| 7337 | UBE3A | ubiquitin protein ligase E3A | -0.504 | 1.467 |
| 57194 | ATP10A | ATPase phospholipid transporting 10A (putative) | -4.587 | 10.847 |
| 653720 | GOLGA8M | golgin A8 family member M | 1.808 | 3.394 |
| 440253 | WHAMMP2 | WHAMMP pseudogene 2 | 2.182 | 4.131 |
| 321 | APBA2 | amyloid beta precursor protein binding family A member 2 | -3.795 | 3.677 |
| 56160 | NSMCE3 | NSE3 homolog, SMC5-SMC6 complex component | -2.41 | 15.845 |
| 653073 | GOLGA8J | golgin A8 family member J | 1.041 | 2.226 |
| 89837 | ULK4P3 | ULK4 pseudogene 3 | 1.219 | 1.737 |
| 653075 | GOLGA8T | golgin A8 family member T | 1.098 | 2.902 |
| 89832 | CHRFAM7A | CHRNA7 (exons 5-10) and FAM7A (exons A-E) fusion | 1.468 | 1.849 |
| 101059918 | GOLGA8R | golgin A8 family member R | 1.031 | 2.259 |
| 100288203 | WHAMMP4 | WHAMMP pseudogene 4 | 1.054 | 3.423 |
| 727909 | GOLGA8Q | golgin A8 family member Q | 1.002 | 1.755 |
| 100288380 | ULK4P2 | ULK4 pseudogene 2 | 1.214 | 2.379 |
| 102729021 | ARHGAP11B-DT | ARHGAP11B divergent transcript | 0.665 | 1.307 |
| 728498 | GOLGA8H | golgin A8 family member H | 1.207 | 2.995 |
| 89839 | ARHGAP11B | Rho GTPase activating protein 11B | 1.717 | 2.704 |
| 100288637 | LOC100288637 | OTU deubiquitinase 7A pseudogene | 1.691 | 2.372 |
| 1139 | CHRNA7 | cholinergic receptor nicotinic alpha 7 subunit | 1.477 | 1.617 |
| 653125 | GOLGA8K | golgin A8 family member K | 1.251 | 4.233 |
| 89838 | ULK4P1 | ULK4 pseudogene 1 | 1.294 | 2.624 |
| 728047 | GOLGA8O | golgin A8 family member O | 1.056 | 2.382 |
| 107987222 | LOC107987222 | WHAMMP pseudogene 1 | 1.201 | 7.401 |
| 100288615 | WHAMMP1 | golgin A8 family member N | 1.009 | 6.088 |
| 643699 | GOLGA8N | Rho GTPase activating protein 11A | 1.26 | 3.521 |
| 9824 | ARHGAP11A | ARHGAP11A-SCG5 readthrough | 2.172 | 3.653 |
| 114118903 | ARHGAP11A-SCG5 | apoptosis and caspase activation inhibitor | 1.956 | 3.646 |
| 57099 | AVEN | piggyBac transposable element derived 4 | -0.946 | 2.195 |
| 161779 | PGBD4 | solute carrier family 12 member 6 | 0.703 | 1.322 |
| 9990 | SLC12A6 | NOP10 ribonucleoprotein | 0.677 | 1.652 |
| 55505 | NOP10 | lysophosphatidylcholine acyltransferase 4 | 0.679 | 2.493 |
| 254531 | LPCAT4 | golgin A8 family member B | -0.622 | 1.356 |
| 442070 | GOLGA8B | zinc finger protein 770 | 1.044 | 1.595 |
| 54989 | ZNF770 | sprouty related EVH1 domain containing 1 | 0.97 | 2.643 |
| 161742 | SPRED1 | fibrous sheath interacting protein 1 | -2.767 | 2.578 |
| 161835 | FSIP1 | signal recognition particle 14 | 2.592 | 2.011 |
| 6727 | SRP14 | Bcl2 modifying factor | 0.419 | 1.671 |
| 90427 | BMF | BUB1 mitotic checkpoint serine/threonine kinase B | -1.673 | 4.895 |
| 701 | BUB1B | uncharacterized LOC107984763 | 3.04 | 1.609 |
| 107984763 | LOC107984763 | BUB1B-PAK6 readthrough | 2.873 | 1.581 |
| 106821730 | BUB1B-PAK6 | InaF motif containing 2 | 2.877 | 2.521 |
| 100505573 | INAFM2 | dispatched RND transporter family member 2 | -1.188 | 6.108 |
| 85455 | DISP2 | isovaleryl-CoA dehydrogenase | 1.39 | 2.739 |
| 3712 | IVD | carbohydrate sulfotransferase 14 | -0.605 | 1.405 |
| 113189 | CHST14 | kinetochore scaffold 1 | -0.994 | 1.926 |
| 57082 | KNL1 | RAD51 recombinase | 2.679 | 2.852 |
| 5888 | RAD51 | GTP cyclohydrolase 1 feedback regulator | 2.703 | 3.241 |
| 2644 | GCHFR | serine peptidase inhibitor, Kunitz type 1 | 0.912 | 2.912 |
| 6692 | SPINT1 | INO80 complex ATPase subunit | -1.605 | 2.169 |
| 54617 | INO80 | OIP5 antisense RNA 1 | -0.611 | 3.239 |
| 729082 | OIP5-AS1 | Opa interacting protein 5 | 0.662 | 1.588 |
| 11339 | OIP5 | nucleolar and spindle associated protein 1 | 2.578 | 2.983 |
| 51203 | NUSAP1 | inositol-trisphosphate 3-kinase A | 2.8 | 3.548 |
| 3706 | ITPKA | MAX dimerization protein MGA | 2.13 | 1.442 |
| 23269 | MGA | spectrin beta, non-erythrocytic 5 | -0.44 | 2.36 |
| 51332 | SPTBN5 | uncharacterized LOC105370792 | -1.354 | 2.413 |
| 105370792 | LOC105370792 | EH domain containing 4 | -1.522 | 4.545 |
| 30844 | EHD4 | VPS39 subunit of HOPS complex | -1.039 | 5.874 |
| 23339 | VPS39 | VPS39 divergent transcript | 0.433 | 1.363 |
| 105370795 | VPS39-DT | transmembrane protein 87A | 0.988 | 1.867 |
| 25963 | TMEM87A | calpain 3 | 0.739 | 3.15 |
| 825 | CAPN3 | zinc finger protein 106 | 1.096 | 1.623 |
| 64397 | ZNF106 | leucine rich repeat containing 57 | -0.472 | 1.396 |
| 255252 | LRRC57 | HAUS augmin like complex subunit 2 | 0.822 | 4.33 |
| 55142 | HAUS2 | codanin 1 | 0.989 | 3.068 |
| 146059 | CDAN1 | tau tubulin kinase 2 | 0.473 | 1.462 |
| 146057 | TTBK2 | ubiquitin protein ligase E3 component n-recognin 1 | -0.615 | 3.152 |
| 197131 | UBR1 | cyclin D1 binding protein 1 | 0.56 | 2.21 |
| 23582 | CCNDBP1 | zinc finger and SCAN domain containing 29 | 1.147 | 12.881 |
| 146050 | ZSCAN29 | microfibril associated protein 1 | -0.406 | 1.474 |
| 4236 | MFAP1 | WD repeat domain 76 | 0.796 | 1.544 |
| 79968 | WDR76 | FERM domain containing 5 | 2.322 | 2.912 |
| 84978 | FRMD5 | beta-2-microglobulin | 2.26 | 1.447 |
| 567 | B2M | microRNA 10393 | -0.731 | 1.625 |
| 113218500 | MIR10393 | ring finger protein 4 pseudogene | -0.699 | 1.595 |
| 100419583 | LOC100419583 | sorbitol dehydrogenase 2, pseudogene | -1.928 | 3.146 |
| 653381 | SORD2P | sorbitol dehydrogenase | -1.274 | 3.528 |
| 6652 | SORD | glycine amidinotransferase | -1.228 | 4.385 |
| 2628 | GATM | chromosome 15 open reading frame 48 | -2.144 | 1.668 |
| 84419 | C15orf48 | uncharacterized LOC105376714 | -1.973 | 1.403 |
| 105376714 | LOC105376714 | solute carrier family 30 member 4 | -2.09 | 1.495 |
| 7782 | SLC30A4 | biogenesis of lysosomal organelles complex 1 subunit 6 | -2.895 | 3.551 |
| 26258 | BLOC1S6 | sulfide quinone oxidoreductase | -0.404 | 1.302 |
| 58472 | SQOR | deoxyuridine triphosphatase | 0.72 | 3.159 |
| 1854 | DUT | fibrillin 1 | 1.557 | 2.632 |
| 2200 | FBN1 | | 3.521 | 3.884 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 22995 | CEP152 | centrosomal protein 152 | 0.705 | 1.432 |
| 23741 | EID1 | EP300 interacting inhibitor of differentiation 1 | -0.927 | 5.769 |
| 56986 | DTWD1 | DTW domain containing 1 | -0.933 | 1.698 |
| 79895 | ATP8B4 | ATPase phospholipid transporting 8B4 (putative) | 2.319 | 2.719 |
| 102724587 | LOC102724587 | uncharacterized LOC102724587 | 2.187 | 2.279 |
| 11001 | SLC27A2 | solute carrier family 27 member 2 | 2.989 | 1.438 |
| 1588 | CYP19A1 | cytochrome P450 family 19 subfamily A member 1 | 6.453 | 5.118 |
| 342035 | GLDN | gliomedin | 3.597 | 3.311 |
| 23312 | DMXL2 | Dmx like 2 | -1.137 | 5.167 |
| 256586 | LYSMD2 | LysM domain containing 2 | -2.071 | 3.8 |
| 29767 | TMOD2 | tropomodulin 2 | -0.868 | 2.566 |
| 112268148 | LOC112268148 | uncharacterized LOC112268148 | 0.597 | 1.462 |
| 10776 | ARPP19 | cAMP regulated phosphoprotein 19 | 0.732 | 3.832 |
| 51187 | RSL24D1 | ribosomal L24 domain containing 1 | 0.98 | 2.396 |
| 5873 | RAB27A | RAB27A, member RAS oncogene family | 1.949 | 7.938 |
| 101928527 | PIGBOS1 | PIGB opposite strand 1 | 0.988 | 4.001 |
| 9488 | PIGB | phosphatidylinositol glycan anchor biosynthesis class B | 0.925 | 3.012 |
| 100533483 | DNAAF4-CCPG1 | DNAAF4-CCPG1 readthrough (NMD candidate) | 1.849 | 12.451 |
| 9236 | CCPG1 | cell cycle progression 1 | 1.828 | 12.201 |
| 693213 | MIR628 | microRNA 628 | 2.241 | 5.636 |
| 4734 | NEDD4 | NEDD4 E3 ubiquitin protein ligase | 1.748 | 4.401 |
| 64864 | RFX7 | regulatory factor X7 | -1.057 | 3.879 |
| 54816 | ZNF280D | zinc finger protein 280D | 1.106 | 3.357 |
| 283663 | LINC00926 | long intergenic non-protein coding RNA 926 | -2.194 | 4.118 |
| 102 | ADAM10 | ADAM metallopeptidase domain 10 | -0.721 | 2.684 |
| 54629 | MINDY2 | MINDY lysine 48 deubiquitinase 2 | 0.931 | 4.659 |
| 79811 | SLTM | SAFB like transcription modulator | 0.655 | 2.312 |
| 9133 | CCNB2 | cyclin B2 | 3.051 | 3.565 |
| 4643 | MYO1E | myosin IE | -1.5 | 3.643 |
| 302 | ANXA2 | annexin A2 | -1.962 | 19.144 |
| 6095 | RORA | RAR related orphan receptor A | -3.247 | 3.773 |
| 54832 | VPS13C | vacuolar protein sorting 13 homolog C | -1.254 | 5.599 |
| 83660 | TLN2 | talin 2 | 1.857 | 1.973 |
| 7168 | TPM1 | tropomyosin 1 | 1.999 | 10.496 |
| 111064646 | TPM1-AS | TPM1 antisense RNA | 2.161 | 4.203 |
| 83464 | APH1B | aph-1 homolog B, gamma-secretase subunit | 0.564 | 1.664 |
| 9960 | USP3 | ubiquitin specific peptidase 3 | -0.669 | 1.912 |
| 23604 | DAPK2 | death associated protein kinase 2 | 3.173 | 5.873 |
| 101928988 | LOC101928988 | uncharacterized LOC101928988 | 2.915 | 4.955 |
| 84191 | CIAO2A | cytosolic iron-sulfur assembly component 2A | -0.437 | 1.935 |
| 9768 | PCLAF | PCNA clamp associated factor | 3.034 | 1.636 |
| 23060 | ZNF609 | zinc finger protein 609 | -1.743 | 6.031 |
| 4947 | OAZ2 | ornithine decarboxylase antizyme 2 | -0.914 | 1.652 |
| 80119 | PIF1 | PIF1 5'-to-3' DNA helicase | 2.725 | 4.813 |
| 123263 | MTFMT | mitochondrial methionyl-tRNA formyltransferase | 1.025 | 3.414 |
| 390595 | UBAP1L | ubiquitin associated protein 1 like | -0.793 | 1.394 |
| 10081 | PDCD7 | programmed cell death 7 | -0.615 | 2.049 |
| 54956 | PARP16 | poly(ADP-ribose) polymerase family member 16 | 0.873 | 1.726 |
| 26831 | RNU5A-1 | RNA, U5A small nuclear 1 | 3.992 | 4.145 |
| 105370866 | LOC105370866 | uncharacterized LOC105370866 | 2.477 | 4.027 |
| 54962 | TIPIN | TIMELESS interacting protein | 1.115 | 2.727 |
| 197021 | LCTL | lactase like | 1.125 | 1.44 |
| 4091 | SMAD6 | SMAD family member 6 | -2.033 | 1.977 |
| 4088 | SMAD3 | SMAD family member 3 | -1.798 | 9.268 |
| 100506686 | IQCH-AS1 | IQCH antisense RNA 1 | -0.906 | 1.456 |
| 101929076 | SKOR1-AS1 | SKOR1 antisense RNA 1 | 3.169 | 4.229 |
| 26827 | RNU6-1 | RNA, U6 small nuclear 1 | 2.041 | 2.331 |
| 8554 | PIAS1 | protein inhibitor of activated STAT 1 | 0.503 | 2.079 |
| 91860 | CALML4 | calmodulin like 4 | -0.643 | 2.438 |
| 8125 | ANP32A | acidic nuclear phosphoprotein 32 family member A | 0.554 | 2.752 |
| 26035 | GLCE | glucuronic acid epimerase | -1.781 | 7.791 |
| 54852 | PAQR5 | progesterin and adipQ receptor family member 5 | 2.442 | 1.823 |
| 145694 | KIF23-AS1 | KIF23 and PAQR5 antisense RNA 1 | 2.625 | 3.687 |
| 9493 | KIF23 | kinesin family member 23 | 3.214 | 5.88 |
| 55075 | UACA | veal autoantigen with coiled-coil domains and ankyrin repeats | -1.95 | 5.956 |
| 4649 | MYO9A | myosin IXA | -0.835 | 4.59 |
| 5315 | PKM | pyruvate kinase M1/2 | 0.745 | 7.429 |
| 60677 | CELF6 | CUGBP Elav-like family member 6 | 1.851 | 4.856 |
| 3073 | HEXA | hexosaminidase subunit alpha | 0.45 | 2.301 |
| 80072 | HEXA-AS1 | HEXA antisense RNA 1 | 1.611 | 7.163 |
| 25820 | ARIH1 | ariadne RBR E3 ubiquitin protein ligase 1 | -0.308 | 1.321 |
| 4756 | NEO1 | neogenin 1 | 2.354 | 4.022 |
| 101241892 | NPTN-IT1 | NPTN intronic transcript 1 | 0.868 | 1.443 |
| 100287616 | LOXL1-AS1 | LOXL1 antisense RNA 1 | 2.158 | 2.837 |
| 4016 | LOXL1 | lysyl oxidase like 1 | 3.772 | 8.643 |
| 8482 | SEMA7A | semaphorin 7A (John Milton Hagen blood group) | -1.733 | 1.713 |
| 102723750 | LOC102723750 | uncharacterized LOC102723750 | -1.264 | 2.706 |
| 1198 | CLK3 | CDC like kinase 3 | 0.678 | 1.837 |
| 1445 | CSK | C-terminal Src kinase | -1.229 | 5.275 |
| 4351 | MPI | mannose phosphate isomerase | 0.71 | 2.836 |
| 57184 | FAM219B | family with sequence similarity 219 member B | 1.5 | 9.416 |
| 54913 | RPP25 | ribonuclease P and MRP subunit p25 | -3.23 | 15.027 |
| 192683 | SCAMP5 | secretory carrier membrane protein 5 | -3.013 | 3.313 |
| 60490 | PPCDC | phosphopantothenoylcysteine decarboxylase | -1.102 | 2.926 |
| 107987225 | LOC107987225 | chromosome 15 open reading frame 39 | 2.418 | 2.999 |
| 56905 | C15orf39 | COMM domain containing 4 | -1.226 | 5.958 |
| 54939 | COMMD4 | protein tyrosine phosphatase non-receptor type 9 | 0.487 | 1.583 |
| 5780 | PTPN9 | uncharacterized LOC105370902 | -0.437 | 1.515 |
| 105370902 | LOC105370902 | IMP3 | -0.742 | 1.328 |
| 55272 | IMP3 | IMP U3 small nucleolar ribonucleoprotein 3 | -0.827 | 3.093 |
| 257364 | SNX33 | sorting nexin 33 | -2.585 | 6.56 |
| 1464 | CSPG4 | chondroitin sulfate proteoglycan 4 | -4.72 | 3.162 |
| 9051 | PSTPIP1 | proline-serine-threonine phosphatase interacting protein 1 | 0.998 | 5.291 |
| 10099 | TSPAN3 | tetraspanin 3 | 0.978 | 2.709 |
| 79834 | PEAK1 | pseudopodium enriched atypical kinase 1 | 1.459 | 13.365 |
| 10363 | HMG20A | high mobility group 20A | -0.467 | 1.756 |
| 23102 | TBC1D2B | TBC1 domain family member 2B | 1.118 | 7.992 |
| 3419 | IDH3A | isocitrate dehydrogenase (NAD(+)) 3 catalytic subunit alpha | -1.809 | 19.159 |
| 23205 | ACSBG1 | acyl-CoA synthetase bubblegum family member 1 | -1.635 | 10.291 |
| 5685 | PSMA4 | proteasome 20S subunit alpha 4 | -0.593 | 2.146 |
| 11173 | ADAMTS7 | ADAM metallopeptidase with thrombospondin type 1 motif 7 | 4.054 | 3.825 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 1512 | CTSH | cathepsin H | -1.456 | 4.058 |
| 23251 | MINAR1 | membrane integral NOTCH2 associated receptor 1 | 1.937 | 1.898 |
| 400410 | ST20 | suppressor of tumorigenicity 20 | 1.346 | 3.262 |
| 283687 | ST20-AS1 | ST20 antisense RNA 1 | 0.822 | 1.618 |
| 23184 | MESD | mesoderm development LRP chaperone | -0.653 | 1.432 |
| 59274 | TLNRD1 | talin rod domain containing 1 | -0.998 | 3.034 |
| 3603 | IL16 | interleukin 16 | 0.866 | 3.245 |
| 80765 | STARD5 | StAR related lipid transfer domain containing 5 | 0.972 | 3.784 |
| 101929655 | TMC3-AS1 | TMC3 antisense RNA 1 | 4.015 | 7.631 |
| 342125 | TMC3 | transmembrane channel like 3 | 3.634 | 11.971 |
| 647042 | GOLGA6L10 | golgin A6 family like 10 | 2.054 | 2.948 |
| 440295 | GOLGA6L9 | golgin A6 family like 9 | 1.693 | 2.491 |
| 642402 | GOLGA6L17P | golgin A6 family like 17, pseudogene | 2.27 | 3.113 |
| 100505616 | SNHG21 | small nucleolar RNA host gene 21 | 1.866 | 7.274 |
| 123722 | FSD2 | fibronectin type III and SPRY domain containing 2 | 2.163 | 4.608 |
| 123720 | WHAMM | WASP homolog associated with actin, golgi membranes and microtubules | 0.926 | 1.568 |
| 53346 | TM6SF1 | transmembrane 6 superfamily member 1 | 0.757 | 1.639 |
| 50810 | HDGFL3 | HDGF like 3 | 0.92 | 3.006 |
| 643707 | GOLGA6L4 | golgin A6 family like 4 | 2.397 | 5.232 |
| 102724093 | LOC102724093 | golgin subfamily A member 6-like protein 4 | 2.558 | 5.533 |
| 102724117 | LOC102724117 | golgin subfamily A member 6-like protein 4 | 2.326 | 5.956 |
| 374650 | GOLGA6L5P | golgin A6 family like 5, pseudogene | 2.225 | 6.216 |
| 388165 | UBE2Q2P1 | UBE2Q2 pseudogene 1 | 2.289 | 7.789 |
| 100506874 | LINC00933 | long intergenic non-protein coding RNA 933 | 1.951 | 1.583 |
| 5151 | PDE8A | phosphodiesterase 8A | -1.293 | 8.434 |
| 100133220 | GOLGA6L3P | golgin A6 family like 3, pseudogene | 2.445 | 2.309 |
| 11214 | AKAP13 | A-kinase anchoring protein 13 | -0.846 | 2.946 |
| 64782 | AEN | apoptosis enhancing nuclease | -1.565 | 2.523 |
| 145864 | HAPLN3 | hyaluronan and proteoglycan link protein 3 | -3.009 | 8.966 |
| 4240 | MFGE8 | milk fat globule EGF and factor V/VIII domain containing | 2.304 | 3.362 |
| 55215 | FANCI | FA complementation group I | 1.879 | 3.789 |
| 90381 | TICRR | TOPBP1 interacting checkpoint and replication regulator | 3.093 | 1.406 |
| 105370965 | LOC105370965 | actin related protein 2/3 complex inhibitor | 1.754 | 2.306 |
| 348110 | ARPIN | zinc finger protein 710 | -2.905 | 6.52 |
| 374655 | ZNFT10 | ZNFT10 antisense RNA 1 | -1.44 | 7.998 |
| 109729181 | ZNFT10-AS1 | CREB regulated transcription coactivator 3 | -1.359 | 5.116 |
| 64784 | CRTC3 | CRTC3 antisense RNA 1 | -2.043 | 15.17 |
| 112268163 | LOC112268163 | BLM RecQ like helicase | -1.248 | 1.878 |
| 101926895 | CRTC3-AS1 | uncharacterized LOC105370969 | -1.461 | 2.581 |
| 641 | BLM | mannosidase alpha class 2A member 2 | 2.293 | 3.789 |
| 105370969 | LOC105370969 | unc-45 myosin chaperone A | 1.282 | 2.77 |
| 4122 | MAN2A2 | RCC1 domain containing 1 | 1.13 | 2.938 |
| 55898 | UNC45A | protein regulator of cytokinesis 1 | 0.804 | 6.095 |
| 91433 | RCCD1 | PRC1 antisense RNA 1 | 1.369 | 3.541 |
| 9055 | PRC1 | family with sequence similarity 174 member B | 2.666 | 6.737 |
| 100507118 | PRC1-AS1 | uncharacterized LOC101926994 | 2.662 | 6.405 |
| 400451 | FAM174B | ankyrin repeat and SOCS box containing 9 pseudogene 1 | 1.128 | 3.59 |
| 101926994 | LOC101926994 | long intergenic non-protein coding RNA 2207 | 1.561 | 1.445 |
| 728619 | ASBP9P1 | multiple C2 and transmembrane domain containing 2 | 2.78 | 4.066 |
| 101927153 | LINC02207 | NOP53 ribosome biogenesis factor pseudogene | 1.639 | 2.87 |
| 55784 | MCTP2 | arrestin domain containing 4 | 2.272 | 7.446 |
| 440311 | LOC440311 | IGF1R antisense imprinted non-protein coding RNA | -1.2 | 1.788 |
| 91947 | ARRDC4 | insulin like growth factor 1 receptor | -2.16 | 9.201 |
| 104472848 | IRAIN | leukemia-associated non-coding IGF1R activator RNA 1 | 2.237 | 15.874 |
| 3480 | IGF1R | leucine rich repeat containing 28 | 3.606 | 3.015 |
| 104564224 | LUNAR1 | dynamin 1 pseudogene 46 | 0.464 | 1.894 |
| 123355 | LRRC28 | ankyrin repeat and SOCS box containing 7 | 1.517 | 1.345 |
| 196968 | DNM1P46 | ALDH1A3 antisense RNA 1 | 0.65 | 2.173 |
| 140460 | ASB7 | threonyl-tRNA synthetase 3 | 1.734 | 1.894 |
| 101927751 | ALDH1A3-AS1 | small nuclear ribonucleoprotein U11/U12 subunit 25 | -2.068 | 10.135 |
| 123283 | TARS3 | axin 1 | 0.95 | 1.736 |
| 79622 | SNRNP25 | mitochondrial ribosomal protein L28 | 0.925 | 8.139 |
| 8312 | AXIN1 | post-GPI attachment to proteins 6 | 0.392 | 1.359 |
| 10573 | MRPL28 | replaced by ID 58986 | 0.612 | 2.194 |
| 58986 | PGAP6 | NHL repeat containing 4 | 1.987 | 2.649 |
| 105371036 | LOC105371036 | methyltransferase like 26 | -1.675 | 1.497 |
| 283948 | NHLRC4 | WD repeat domain 90 | -0.667 | 1.418 |
| 84326 | METTL26 | rhomboid like 1 | 0.699 | 2.308 |
| 197335 | WDR90 | jumonji domain containing 8 | 1.4 | 1.548 |
| 9028 | RHBDL1 | F-box and leucine rich repeat protein 16 | -0.472 | 1.662 |
| 339123 | JMJD8 | meteorin, glial cell differentiation regulator | -1.492 | 1.891 |
| 146330 | FBXL16 | chromosome transmission fidelity factor 18 | -1.513 | 1.426 |
| 79006 | METRN | N-acetylglucosamine 1-phosphate transferase subunit gamma | 1.882 | 6.044 |
| 63922 | CHTF18 | unk like zinc finger | -0.448 | 1.442 |
| 84572 | GNPTG | uncharacterized LOC101929440 | 0.465 | 1.561 |
| 64718 | UNKL | chloride voltage-gated channel 7 | 1.453 | 1.346 |
| 101929440 | LOC101929440 | intraflagellar transport 140 | -0.547 | 1.596 |
| 1186 | CLCN7 | NME/NM23 nucleoside diphosphate kinase 3 | -1.039 | 2.054 |
| 9742 | IFT140 | methionine sulfoxide reductase B1 | -0.678 | 1.643 |
| 4832 | NME3 | ribosomal protein L3 like | 1.832 | 7.381 |
| 51734 | MSRB1 | ribosomal protein S2 | 2.988 | 3.205 |
| 6123 | RPL3L | small nucleolar RNA host gene 9 | -0.662 | 1.905 |
| 6187 | RPS2 | NHERF family PDZ scaffold protein 2 | 1.189 | 2.201 |
| 735301 | SNHG9 | nth like DNA glycosylase 1 | -2.888 | 4.377 |
| 9351 | NHERF2 | small nucleolar RNA host gene 19 | -1.719 | 5.067 |
| 4913 | NTHL1 | MTOR associated protein, LST8 homolog | 1.366 | 1.544 |
| 100507303 | SNHG19 | ATP binding cassette subfamily A member 3 | -0.795 | 4.048 |
| 64223 | MLST8 | cyclin F | -1.781 | 4.112 |
| 21 | ABCA3 | uncharacterized LOC105371050 | 2.316 | 4.452 |
| 899 | CCNF | tubulin epsilon and delta complex 2 | 2.179 | 2.643 |
| 105371050 | LOC105371050 | TBC1 domain family member 24 | 2.163 | 1.891 |
| 80178 | TEDC2 | amidohydrolase domain containing 2 | 1 | 2.699 |
| 57465 | TBC1D24 | cementum protein 1 | 1.155 | 5.664 |
| 51005 | AMDHD2 | potassium channel tetramerization domain containing 5 pseudogene | 1.057 | 3.816 |
| 752014 | CEMP1 | potassium channel tetramerization domain containing 5 | -0.881 | 2.432 |
| 652276 | LOC652276 | zymogen granule protein 16B | -0.81 | 1.537 |
| 54442 | KCTD5 | uncharacterized LOC105371055 | -1.309 | 2.65 |
| 124220 | ZG16B | progesterin and adiponid receptor family member 4 | 2.691 | 4.591 |
| 105371055 | LOC105371055 | protein kinase, membrane associated tyrosine/threonine 1 | 1.032 | 1.847 |
| 124222 | PAQR4 | 9088 | 2.728 | 4.041 |
| | PKMYT1 | | | |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|---------------|---|----------|----------|
| 283875 | GREP1 | glycine rich extracellular protein 1 | 4.137 | 6.022 |
| 107984895 | LOC107984895 | | 2.76 | 6.28 |
| 105371056 | LOC105371056 | | 3.009 | 10.394 |
| 9080 | CLDN9 | claudin 9 | 3.272 | 14.317 |
| 100128770 | LOC100128770 | uncharacterized LOC100128770 | 2.391 | 2.101 |
| 64386 | MMP25 | matrix metallopeptidase 25 | 2.987 | 11.321 |
| 100507419 | MMP25-AS1 | MMP25 antisense RNA 1 | 2.719 | 12.045 |
| 283876 | LINC00921 | long intergenic non-protein coding RNA 921 | 1.133 | 3.361 |
| 146434 | ZNF597 | zinc finger protein 597 | 0.947 | 1.843 |
| 79903 | NAA60 | N-alpha-acetyltransferase 60, NatF catalytic subunit | 0.616 | 1.863 |
| 23059 | CLUAP1 | clusterin associated protein 1 | -1.505 | 2.923 |
| 1773 | DNASE1 | deoxyribonuclease 1 | 1.656 | 10.528 |
| 115 | ADCY9 | adenylylate cyclase 9 | -2.481 | 12.204 |
| 7023 | TFAP4 | transcription factor AP-4 | -1.303 | 2.749 |
| 51025 | PAM16 | presequence translocase associated motor 16 | 0.986 | 3.415 |
| 9093 | DNAJA3 | DnaJ heat shock protein family (Hsp40) member A3 | -0.72 | 1.759 |
| 57407 | NMRAL1 | NmrA like redox sensor 1 | -0.858 | 2.306 |
| 29965 | CDIP1 | cell death inducing p53 target 1 | -2.581 | 14.646 |
| 342346 | C16orf96 | chromosome 16 open reading frame 96 | -1.612 | 1.41 |
| 84309 | NUDT16L1 | nudix hydrolase 16 like 1 | 0.366 | 1.303 |
| 124404 | SEPTIN12 | septin 12 | 3.519 | 2.659 |
| 440335 | SMIM22 | small integral membrane protein 22 | 2.743 | 3.463 |
| 79641 | ROGDI | rogdi atypical leucine zipper | 1.504 | 8.029 |
| 29855 | UBN1 | ubinuclein 1 | 1.315 | 5.777 |
| 5493 | PPL | periplakin | 1.46 | 2.508 |
| 51172 | NAGPA | N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase | -1.322 | 4.656 |
| 56052 | ALG1 | ALG1 chitobiosyldiphosphodolichol beta-mannosyltransferase | -0.79 | 2.127 |
| 196483 | EEF2KMT | eukaryotic elongation factor 2 lysine methyltransferase | -1.227 | 4.389 |
| 100130283 | LOC100130283 | uncharacterized LOC100130283 | 1.283 | 6.401 |
| 23589 | CARHSP1 | calcium regulated heat stable protein 1 | 1.488 | 10.721 |
| 29035 | HAPSTR1 | HUWE1 associated protein modifying stress responses | 0.64 | 1.859 |
| 4682 | NUBP1 | NUBP iron-sulfur cluster assembly factor 1, cytosolic | -0.458 | 1.735 |
| 4261 | CITA | class II major histocompatibility complex transactivator | -3.456 | 12.492 |
| 28955 | DEXI | Dexi homolog | -1.337 | 5.727 |
| 23274 | CLEC16A | C-type lectin domain containing 16A | 0.725 | 3.769 |
| 9516 | LITAF | lipopolysaccharide induced TNF factor | 1.166 | 1.35 |
| 8303 | SNN | stannin | -1.816 | 4.787 |
| 26156 | RSL1D1 | ribosomal L1 domain containing 1 | -1.251 | 3.966 |
| 92017 | SNX29 | sorting nexin 29 | -1.251 | 4.705 |
| 105371085 | LOC105371085 | uncharacterized LOC105371085 | -1.277 | 2.865 |
| 105371088 | LOC105371088 | uncharacterized LOC105371088 | -1.18 | 1.414 |
| 55313 | CPPED1 | calcineurin like phosphoesterase domain containing 1 | -0.827 | 1.359 |
| 123803 | NTAN1 | N-terminal asparagine amidase | 0.848 | 3.459 |
| 105369154 | PKD1P6-NPIPP1 | PKD1P6-NPIPP1 readthrough | -0.898 | 1.591 |
| 64131 | XYLT1 | xylosyltransferase 1 | -1.394 | 11.516 |
| 102723692 | LOC102723692 | uncharacterized LOC102723692 | -1.549 | 5.171 |
| 107987234 | LOC107987234 | uncharacterized LOC107987234 | -0.748 | 1.663 |
| 162073 | ITPRIP1 | ITPRIP like 2 | -1.911 | 8.771 |
| 51760 | SYT17 | synaptotagmin 17 | -4.373 | 6.178 |
| 9738 | CCP110 | centriolar coiled-coil protein 110 | 0.6 | 1.447 |
| 57020 | VPS35L | VPS35 endosomal protein sorting factor like | -0.503 | 1.966 |
| 400506 | KNOP1 | lysine rich nucleolar protein 1 | -0.816 | 2.804 |
| 124152 | IQCK | IQ motif containing K | -2.11 | 1.799 |
| 116285 | ACSM1 | acyl-CoA synthetase medium chain family member 1 | 1.379 | 1.608 |
| 112479 | ERI2 | ERI1 exoribonuclease family member 2 | 0.886 | 1.586 |
| 81691 | REXO5 | RNA exonuclease 5 | 2.267 | 3.213 |
| 57149 | LYRM1 | LYR motif containing 1 | 0.839 | 4.204 |
| 51108 | METTL9 | methylytransferase like 9 | 1.184 | 9.842 |
| 7385 | UQCRC2 | ubiquinol-cytochrome c reductase core protein 2 | -0.538 | 3.086 |
| 255762 | PDZD9 | PDZ domain containing 9 | -0.687 | 1.976 |
| 29904 | EEF2K | eukaryotic elongation factor 2 kinase | 0.756 | 2.956 |
| 23062 | GG42 | golgi associated, gamma adaptin ear containing, ARF binding protein 2 | -0.537 | 2.459 |
| 124454 | EARS2 | glutamyl-tRNA synthetase 2, mitochondrial | -1.708 | 5.999 |
| 79728 | PALB2 | partner and localizer of BRCA2 | -1.024 | 3.36 |
| 84516 | DCTN5 | dynactin subunit 5 | 0.532 | 1.739 |
| 5347 | PLK1 | polo like kinase 1 | 3.116 | 4.049 |
| 27327 | TNRC6A | trinucleotide repeat containing adaptor 6A | -0.479 | 2.664 |
| 55114 | ARHGAP17 | Rho GTPase activating protein 17 | -1.298 | 9.012 |
| 3566 | IL4R | interleukin 4 receptor | 1.498 | 10.426 |
| 50615 | IL21R | interleukin 21 receptor | -3.894 | 10.825 |
| 283888 | IL21R-AS1 | IL21R antisense RNA 1 | -3.631 | 5.735 |
| 388228 | SBK1 | SH3 domain binding kinase 1 | -3.458 | 2.014 |
| 728689 | EIF3CL | eukaryotic translation initiation factor 3 subunit C like | -0.702 | 1.973 |
| 112869 | SGF29 | SAGA complex associated factor 29 | -0.862 | 2.511 |
| 8663 | EIF3C | eukaryotic translation initiation factor 3 subunit C | -0.699 | 1.932 |
| 487 | ATP2A1 | ATPase sarcoplasmic/endoplasmic reticulum Ca2+ transporting 1 | 1.037 | 1.48 |
| 79874 | RABEP2 | rabaptin, RAB GTPase binding effector protein 2 | -1.086 | 4.154 |
| 930 | CD19 | CD19 molecule | -3.464 | 7.015 |
| 83985 | SPNS1 | SPNS lysolipid transporter 1, lysophospholipid | -0.424 | 1.368 |
| 653390 | RRN3P2 | RRN3 pseudogene 2 | 0.767 | 1.554 |
| 101928215 | LOC101928215 | uncharacterized LOC101928215 | 1.318 | 1.71 |
| 606724 | LOC606724 | coronin 1A pseudogene | 0.952 | 5.696 |
| 100526831 | SLX1B-SULT1A4 | SLX1B-SULT1A4 readthrough (NMD candidate) | -0.711 | 1.835 |
| 445329 | SULT1A4 | sulfotransferase family 1A member 4 | -0.853 | 2.365 |
| 388242 | LOC388242 | SAGA complex associated factor 29 pseudogene | -2.561 | 3.262 |
| 283897 | C16orf54 | chromosome 16 open reading frame 54 | 1.129 | 2.368 |
| 3835 | KIF22 | kinesin family member 22 | 1.6 | 4.868 |
| 107984837 | LOC107984837 | MYC associated zinc finger protein | 1.991 | 6.253 |
| 4150 | MAZ | translation initiation factor IF-2-like | 0.773 | 3.435 |
| 112268170 | LOC112268170 | KCTD13-DT | 0.881 | 4.157 |
| 107984836 | KCTD13-DT | KCTD13 divergent transcript | 1.37 | 1.63 |
| 124446 | TMEM219 | transmembrane protein 219 | -0.644 | 2.63 |
| 8479 | HIRIP3 | HIRA interacting protein 3 | 1.434 | 3.027 |
| 112694756 | LOC112694756 | uncharacterized LOC112694756 | 0.443 | 2.763 |
| 226 | ALDOA | aldolase, fructose-bisphosphate A | 0.453 | 2.862 |
| 83719 | YPEL3 | yippee like 3 | 0.922 | 1.335 |
| 107984834 | CORO1A-AS1 | CORO1A antisense RNA 1 | 1.013 | 9.366 |
| 11151 | CORO1A | coronin 1A | 0.845 | 5.712 |
| 100526830 | SLX1A-SULT1A3 | SLX1A-SULT1A3 readthrough (NMD candidate) | -0.682 | 1.719 |
| 6818 | SULT1A3 | sulfotransferase family 1A member 3 | -0.849 | 2.376 |
| 613038 | LOC613038 | SAGA complex associated factor 29 pseudogene | -2.709 | 3.799 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 10421 | CD2BP2 | CD2 cytoplasmic tail binding protein 2 | 0.359 | 1.415 |
| 101928707 | CD2BP2-DT | CD2BP2 divergent transcript | 0.812 | 1.738 |
| 22928 | SEPHS2 | seleophosphate synthetase 2 | 0.724 | 2.228 |
| 3683 | ITGAL | integrin subunit alpha L | -1.299 | 4.356 |
| 78994 | PRR14 | proline rich 14 | 0.766 | 4.066 |
| 64319 | FBRS | fibrosin | 0.703 | 1.463 |
| 90835 | CFAP119 | cilia and flagella associated protein 119 | 0.553 | 1.822 |
| 1489 | CTF1 | cardiotrophin 1 | 1.741 | 3.372 |
| 283932 | FBXL19-AS1 | FBXL19 antisense RNA 1 | 1.699 | 6.488 |
| 93129 | ORA13 | ORA1 calcium release-activated calcium modulator 3 | 0.742 | 1.886 |
| 9726 | ZNF646 | zinc finger protein 646 | 0.421 | 1.904 |
| 10295 | BCKDK | branched chain keto acid dehydrogenase kinase | -0.793 | 2.066 |
| 3684 | ITGAM | integrin subunit alpha M | 1.926 | 22.324 |
| 79798 | ARMC5 | armadillo repeat containing 5 | 1.286 | 4.689 |
| 100132341 | CLUHP3 | clustered mitochondria homolog pseudogene 3 | -4.256 | 3.319 |
| 79801 | SHCBP1 | SHC binding and spindle associated 1 | 2.679 | 4.339 |
| 23594 | ORC6 | origin recognition complex subunit 6 | 2.453 | 3.789 |
| 81831 | NETO2 | neuropilin and toll-like 2 | -1.386 | 3.257 |
| 255919 | CNEP1R1 | CTD nuclear envelope phosphatase 1 regulatory subunit 1 | -0.528 | 1.816 |
| 55027 | HEATR3 | HEAT repeat containing 3 | -2.231 | 17.293 |
| 64282 | TENT4B | terminal nucleotidyltransferase 4B | -0.861 | 2.076 |
| 113 | ADCY7 | adenylate cyclase 7 | -1.13 | 9.946 |
| 29117 | BRD7 | bromodomain containing 7 | -0.545 | 2.803 |
| 64127 | NOD2 | nucleotide binding oligomerization domain containing 2 | -1.722 | 3.965 |
| 102724907 | CYLD-AS1 | CYLD antisense RNA 1 | -1.303 | 4.202 |
| 643802 | MPHOSPH10P1 | MPHOSPH10 pseudogene 1 | 1.039 | 2.488 |
| 64400 | AKTIP | AKT interacting protein | 2.501 | 14.822 |
| 79068 | FTO | FTO alpha-ketoglutarate dependent dioxygenase | -0.833 | 2.719 |
| 54947 | LPCAT2 | lysophosphatidylcholine acyltransferase 2 | 1.096 | 2.676 |
| 84290 | CAPNS2 | calpain small subunit 2 | 2.482 | 3.132 |
| 583 | BBS2 | Bardet-Biedl syndrome 2 | -1.119 | 3.294 |
| 4502 | MT2A | metallothionein 2A | -2.353 | 3.961 |
| 4493 | MT1E | metallothionein 1E | -2.531 | 2.653 |
| 4494 | MT1F | metallothionein 1F | 0.994 | 1.575 |
| 9688 | NUP93 | nucleoporin 93 | -0.75 | 5.352 |
| 221184 | CPNE2 | copine 2 | 2.238 | 14.254 |
| 105371289 | LOC105371289 | | 2.356 | 5.811 |
| 23568 | ARL2BP | ADP ribosylation factor like GTPase 2 binding protein | -0.471 | 2.059 |
| 57019 | CIAPIN1 | cytokine induced apoptosis inhibitor 1 | -0.562 | 3.259 |
| 57017 | COQ9 | coenzyme Q9 | -0.45 | 1.661 |
| 55715 | DOK4 | docking protein 4 | 2.012 | 6.136 |
| 221188 | ADGRG5 | adhesion G protein-coupled receptor G5 | -2.673 | 1.588 |
| 222487 | ADGRG3 | adhesion G protein-coupled receptor G3 | 3.685 | 5.509 |
| 57567 | ZNF319 | zinc finger protein 319 | 0.553 | 1.851 |
| 4324 | MMP15 | matrix metallopeptidase 15 | 3.351 | 2.768 |
| 64785 | GINS3 | GINS complex subunit 3 | 2.89 | 4.923 |
| 55238 | SLC38A7 | solute carrier family 38 member 7 | -1.465 | 9.039 |
| 7084 | TK2 | thymidine kinase 2 | -0.803 | 1.49 |
| 146225 | CMTM2 | CKLF like MARVEL transmembrane domain containing 2 | 3.489 | 4.394 |
| 146223 | CMTM4 | CKLF like MARVEL transmembrane domain containing 4 | 0.829 | 4.352 |
| 123920 | CMTM3 | CKLF like MARVEL transmembrane domain containing 3 | -1.748 | 4.764 |
| 1783 | DYNC1L2 | dynein cytoplasmic 1 light intermediate chain 2 | 0.835 | 2.176 |
| 6236 | RRAD | RRAD, Ras related glycolysis inhibitor and calcium channel regulator | -2.103 | 1.927 |
| 51647 | CIAO2B | cytosolic iron-sulfur assembly component 2B | -0.6 | 3.391 |
| 283848 | CES4A | carboxylesterase 4A | -1.118 | 2.301 |
| 8996 | NOL3 | nucleolar protein 3 | -1.214 | 1.929 |
| 283849 | EXOC3L1 | exocyst complex component 3 like 1 | -3.657 | 6.122 |
| 1874 | E2F4 | E2F transcription factor 4 | -0.372 | 1.356 |
| 25894 | PLEKHG4 | pleckstrin homology and RhoGEF domain containing G4 | -2.175 | 2.698 |
| 51673 | TPPP3 | tubulin polymerization promoting protein family member 3 | -4.636 | 13.602 |
| 29800 | ZDHHC1 | zinc finger DHHC-type containing 1 | -4.399 | 8.485 |
| 101927837 | ATP6V0D1-DT | ATP6V0D1 divergent transcript | 0.828 | 2.689 |
| 79567 | RIPOR1 | RHO family interacting cell polarization regulator 1 | -1.278 | 4.709 |
| 81577 | GFOD2 | glucosidase fructosidase oxidoreductase domain containing 2 | 2.359 | 7.37 |
| 57215 | THAP11 | THAP domain containing 11 | -1.053 | 4.131 |
| 10204 | NUTF2 | nuclear transport factor 2 | -0.675 | 4.601 |
| 5699 | PSMB10 | proteasome 20S subunit beta 10 | -1.109 | 3.887 |
| 3931 | LCAT | lecithin-cholesterol acyltransferase | -1.287 | 2.308 |
| 6560 | SLC12A4 | solute carrier family 12 member 4 | -1.568 | 3.535 |
| 23659 | PLA2G15 | phospholipase A2 group XV | -1.066 | 6.978 |
| 9057 | SLC7A6 | solute carrier family 7 member 6 | -0.519 | 1.603 |
| 54496 | PRMT7 | protein arginine methyltransferase 7 | -0.611 | 1.697 |
| 55512 | SMPD3 | sphingomyelin phosphodiesterase 3 | -2.269 | 4.492 |
| 79613 | TANGO6 | transport and golgi organization 6 homolog | -0.685 | 2.653 |
| 113455421 | DERPC | DERPC proline and glycine rich nuclear protein | -0.595 | 2.246 |
| 54921 | CHTF8 | chromosome transmission fidelity factor 8 | -0.595 | 2.246 |
| 6645 | SNTB2 | syntrophin beta 2 | 1.466 | 10.373 |
| 84342 | COG8 | component of oligomeric golgi complex 8 | -0.596 | 1.971 |
| 28987 | NOB1 | NIN1 (RPN12) binding protein 1 homolog | -1.277 | 3.618 |
| 100506060 | SMG1P7 | SMG1 pseudogene 7 | -0.666 | 1.426 |
| 16 | AARS1 | alanyl-tRNA synthetase 1 | -0.851 | 1.876 |
| 55308 | DDX19A | DEAD-box helicase 19A | -0.62 | 2.284 |
| 25839 | COG4 | component of oligomeric golgi complex 4 | -0.403 | 1.809 |
| 55697 | VAC14 | VAC14 component of PIKFYVE complex | -0.447 | 1.567 |
| 55783 | CMTR2 | cap methyltransferase 2 | -0.993 | 2.205 |
| 7571 | ZNF23 | zinc finger protein 23 | -1.223 | 3.079 |
| 7567 | ZNF19 | zinc finger protein 19 | -2.397 | 2.587 |
| 23035 | PHLPP2 | PH domain and leucine rich repeat protein phosphatase 2 | -2.692 | 6.513 |
| 9798 | IST1 | IST1 factor associated with ESCRT-III | 0.516 | 1.405 |
| 54957 | TXNL4B | thioredoxin like 4B | 0.756 | 3.073 |
| 3240 | HP | haptoglobin | 3.87 | 5.956 |
| 3250 | HPR | haptoglobin-related protein | 3.786 | 5.206 |
| 83449 | PMFBP1 | polyamine modulated factor 1 binding protein 1 | 1.536 | 2.445 |
| 101927957 | LINC01572 | long intergenic non-protein coding RNA 1572 | 1.937 | 2.979 |
| 463 | ZFHX3 | zinc finger homeobox 3 | -2.244 | 6.314 |
| 5713 | PSMD7 | proteasome 26S subunit, non-ATPase 7 | 0.568 | 2.392 |
| 2734 | GLG1 | golgi glycoprotein 1 | -0.792 | 7.108 |
| 55159 | RFWD3 | ring finger and WD repeat domain 3 | 2.104 | 5.163 |
| 197257 | LDHD | lactate dehydrogenase D | -1.093 | 1.829 |
| 11345 | GABARAPL2 | GABA type A receptor associated protein like 2 | 1.394 | 23.027 |
| 23536 | ADAT1 | adenosine deaminase tRNA specific 1 | 0.464 | 1.783 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|---------------|--|----------|----------|
| 3735 | KARS1 | lysyl-tRNA synthetase 1 | -0.864 | 6.928 |
| 54386 | TERF2IP | TERF2 interacting protein | 0.853 | 4.406 |
| 22879 | MON1B | MON1 homolog B, secretory trafficking associated | 0.463 | 1.608 |
| 283927 | NUDT7 | nudix hydrolase 7 | -2.117 | 2.721 |
| 4094 | MAF | MAF bZIP transcription factor | -1.805 | 3.738 |
| 124359 | CDYL2 | chromodomain Y like 2 | 0.83 | 3.701 |
| 55839 | CENPN | centromere protein N | 1.379 | 2.648 |
| 107984858 | CENPN-AS1 | CENPN antisense RNA 1 | 1.443 | 3.14 |
| 8139 | GAN | gigaxonin | -0.818 | 1.632 |
| 80790 | CMIP | c-Maf inducing protein | -0.589 | 3.014 |
| 5336 | PLCG2 | phospholipase C gamma 2 | 0.646 | 1.763 |
| 1012 | CDH13 | cadherin 13 | -2.833 | 2.968 |
| 3281 | HSPB1 | heat shock factor binding protein 1 | -0.47 | 2.603 |
| 23417 | MLYCD | malonyl-CoA decarboxylase | -0.692 | 2.225 |
| 29948 | OSGIN1 | oxidative stress induced growth inhibitor 1 | -2.013 | 3.595 |
| 8720 | MBTPS1 | membrane bound transcription factor peptidase, site 1 | -0.467 | 1.587 |
| 58189 | WFDC1 | WAP four-disulfide core domain 1 | 2.153 | 1.459 |
| 9914 | ATP2C2 | ATPase secretory pathway Ca2+ transporting 2 | 3.654 | 4.197 |
| 105371374 | ATP2C2-AS1 | ATP2C2 antisense RNA 1 | 3.418 | 6.488 |
| 57707 | MEAK7 | MTOR associated protein, eak-7 homolog | -0.572 | 1.382 |
| 23406 | COTL1 | coactosin like F-actin binding protein 1 | -1.185 | 7.08 |
| 55625 | ZDHHC7 | zinc finger DHHC-type palmitoyltransferase 7 | -0.983 | 3.208 |
| 51659 | GINS2 | GINS complex subunit 2 | 2.87 | 2.759 |
| 10328 | EMC8 | ER membrane protein complex subunit 8 | 0.633 | 3.445 |
| 101928557 | LOC101928557 | uncharacterized LOC101928557 | 1.992 | 3.098 |
| 3394 | IRF8 | interferon regulatory factor 8 | -2.122 | 7.275 |
| 102466732 | MIR6774 | microRNA 6774 | -2.162 | 3.345 |
| 79791 | FBXO31 | F-box protein 31 | -1.093 | 1.892 |
| 81631 | MAP1LC3B | microtubule associated protein 1 light chain 3 beta | 0.942 | 2.414 |
| 84627 | ZNF469 | zinc finger protein 469 | -3.549 | 5.243 |
| 112268182 | LOC112268182 | uncharacterized LOC112268182 | -3.225 | 5.603 |
| 1535 | CYBA | cytochrome b-245 alpha chain | 0.693 | 2.284 |
| 9780 | PIEZO1 | piezo type mechanosensitive ion channel component 1 | -1.155 | 6.531 |
| 100616167 | MIR4722 | microRNA 4722 | -1.718 | 1.392 |
| 100289580 | LOC100289580 | uncharacterized LOC100289580 | -1.242 | 5.842 |
| 81620 | CDT1 | chromatin licensing and DNA replication factor 1 | 2.824 | 2.51 |
| 353 | APRT | adenine phosphoribosyltransferase | -0.658 | 2.282 |
| 2588 | GALNS | galactosamine (N-acetyl)-6-sulfatase | 1.314 | 8.021 |
| 107987238 | LOC107987238 | uncharacterized LOC107983950 | 1.502 | 4.23 |
| 107983950 | LOC107983950 | CBFA2/RUNX1 partner transcriptional co-repressor 3 | 1.781 | 4.899 |
| 863 | CBFA2T3 | cadmium/zinc-transporting ATPase HMA2 | -1.482 | 3.801 |
| 105371409 | LOC105371409 | uncharacterized LOC107984871 | -2.55 | 2.155 |
| 107984871 | LOC107984871 | solute carrier family 22 member 31 | -1.319 | 1.962 |
| 146429 | SLC22A31 | zinc finger protein 778 | 2.753 | 2.978 |
| 197320 | ZNF778 | uncharacterized LOC105371414 | 0.742 | 2.2 |
| 105371414 | LOC105371414 | uncharacterized LOC101930112 | 0.586 | 1.638 |
| 101930112 | LOC101930112 | ribosomal protein L13 | 1.016 | 2.306 |
| 6137 | RPL13 | charged multivesicular body protein 1A | -0.812 | 1.936 |
| 5119 | CHMP1A | spermatogenesis associated 33 | 0.374 | 1.419 |
| 124045 | SPATA33 | cyclin dependent kinase 10 | 0.728 | 1.877 |
| 8558 | CDK10 | zinc finger protein 276 | -0.822 | 2.397 |
| 92822 | ZNF276 | FA complementation group A | 0.435 | 1.599 |
| 2175 | FANCA | differentially expressed in FDCP 8 homolog | 0.658 | 1.922 |
| 54849 | DEF8 | uncharacterized LOC105376786 | 0.809 | 2.44 |
| 105376786 | LOC105376786 | family with sequence similarity 157 member C | 1.224 | 2.619 |
| 100996541 | FAM157C | uncharacterized LOC105376781 | 0.813 | 2.215 |
| 105376781 | LOC105376781 | uncharacterized LOC107987240 | 0.88 | 1.782 |
| 107987240 | LOC107987240 | long intergenic non-protein coding RNA 2887 | 2.207 | 3.366 |
| 105377826 | LINC02887 | uncharacterized LOC101929823 | 1.43 | 3.997 |
| 101929823 | LOC101929823 | uncharacterized LOC105371430 | 1.175 | 3.775 |
| 105371430 | LOC105371430 | chromosome 17 open reading frame 97 | 2.571 | 3.558 |
| 400566 | C17orf97 | refilin B | 2.147 | 3.944 |
| 359845 | RFLNB | TLC domain containing 3A | 3.143 | 7.355 |
| 79850 | TLCD3A | glyoxalase domain containing 4 | 2.506 | 3.983 |
| 51031 | GLOD4 | nucleoredoxin | -0.495 | 2.15 |
| 64359 | NXN | uncharacterized LOC105371480 | 3.415 | 4.689 |
| 105371480 | LOC105371480 | ABR antisense RNA 1 | -1.514 | 3.147 |
| 105371479 | ABR-AS1 | tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein epsilon | -2.722 | 2.636 |
| 7531 | YWHAE | myosin IC | -0.387 | 1.495 |
| 4641 | MYO1C | solute carrier family 43 member 2 | -1.28 | 4.887 |
| 124935 | SLC43A2 | Rab interacting lysosomal protein | -1.503 | 3.542 |
| 83547 | RILP | WD repeat domain 81 | -1.429 | 2.592 |
| 124997 | WDR81 | serpin family F member 2 | -1.294 | 5.073 |
| 5345 | SERPINF2 | serpin family F member 1 | -2.095 | 2.081 |
| 5176 | SERPINF1 | diphthamide biosynthesis 1 | -1.198 | 1.837 |
| 1801 | DPH1 | SMG6 nonsense mediated mRNA decay factor | -0.747 | 2.774 |
| 23293 | SMG6 | TSR1 ribosome maturation factor | 0.828 | 6.583 |
| 55720 | TSR1 | methylytransferase 16, N6-methyladenosine | -0.809 | 3.463 |
| 79066 | METTL16 | clustered mitochondria homolog | -0.517 | 1.352 |
| 23277 | CLUH | P2RX5-TAX1BP3 readthrough (NMD candidate) | -1.134 | 5.272 |
| 100533970 | P2RX5-TAX1BP3 | Tax1 binding protein 3 | -0.531 | 1.639 |
| 30851 | TAX1BP3 | purinergic receptor P2X 5 | -0.747 | 1.84 |
| 5026 | P2RX5 | integrin subunit alpha E | -2.149 | 3.044 |
| 3682 | ITGAE | histone H3 associated protein kinase | 1.252 | 1.891 |
| 83903 | HASPIN | nuclear cap binding subunit 3 | 3.311 | 7.614 |
| 55421 | NCBP3 | purinergic receptor P2X 1 | 1.084 | 7.191 |
| 5023 | P2RX1 | ATPase sarcoplasmic/endoplasmic reticulum Ca2+ transporting 3 | 1.284 | 3.305 |
| 489 | ATP2A3 | SPNS2 antisense RNA 1 | 2.231 | 8.44 |
| 201305 | SPNS3 | SPNS lysolipid transporter 3, sphingosine-1-phosphate (putative) | 1.823 | 4.879 |
| 107985053 | SPNS2-AS1 | SPNS2 antisense RNA 1 | 3.21 | 2.563 |
| 124976 | SPNS2 | SPNS lysolipid transporter 2, sphingosine-1-phosphate | 2.934 | 4.83 |
| 10514 | MYBPP1A | MYB binding protein 1a | -0.808 | 3.147 |
| 27043 | PELP1 | proline, glutamate and leucine rich protein 1 | -0.744 | 2.358 |
| 409 | ARRB2 | arrestin beta 2 | 0.323 | 1.57 |
| 400569 | MED11 | mediator complex subunit 11 | -1.289 | 3.168 |
| 58191 | CXCL16 | C-X-C motif chemokine ligand 16 | -1.237 | 1.747 |
| 84225 | ZMYND15 | zinc finger MYND-type containing 15 | -1.74 | 3.272 |
| 388323 | GLTPD2 | glycolipid transfer protein domain containing 2 | -2.132 | 3.392 |
| 5338 | PLD2 | phospholipase D2 | -1.665 | 2.838 |
| 26001 | RNF167 | ring finger protein 167 | 0.713 | 4.604 |
| 5216 | PFN1 | profilin 1 | 1.026 | 6.904 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|-----------------|---|----------|----------|
| 2027 | ENO3 | enolase 3 | 0.876 | 2.477 |
| 9552 | SPAG7 | sperm associated antigen 7 | -0.511 | 1.399 |
| 10749 | KIF1C | kinesin family member 1C | -0.6 | 2.603 |
| 102724009 | KIF1C-AS1 | KIF1C antisense RNA 1 | -0.658 | 1.313 |
| 100130950 | ZNF594-DT | ZNF594 divergent transcript | -3.5 | 40.606 |
| 388325 | SCIMP | SLP adaptor and CSK interacting membrane protein | -3.393 | 36.105 |
| 9135 | RABEP1 | rabaptin, RAB GTPase binding effector protein 1 | -0.915 | 4.091 |
| 708 | C1QBP | complement C1q binding protein | -0.769 | 3.803 |
| 51009 | DERL2 | derlin 2 | 0.583 | 1.659 |
| 728392 | LOC728392 | uncharacterized LOC728392 | -1.435 | 1.795 |
| 22861 | NLRP1 | NLR family pyrin domain containing 1 | -1.51 | 1.956 |
| 105371507 | LOC105371507 | uncharacterized LOC105371507 | -1.766 | 2.357 |
| 54478 | PIMREG | PICALM interacting mitotic regulator | 4.24 | 5.363 |
| 54739 | XAF1 | XIAP associated factor 1 | -3.248 | 3.799 |
| 100506713 | ALOX12-AS1 | ALOX12 antisense RNA 1 | 0.723 | 1.477 |
| 105371512 | LOC105371512 | uncharacterized LOC105371512 | -3.117 | 3.458 |
| 432 | ASGR1 | asialoglycoprotein receptor 1 | -2.343 | 7.16 |
| 1742 | DLG4 | discs large MAGUK scaffold protein 4 | -1.614 | 5.731 |
| 442898 | MIR324 | microRNA 324 | 0.965 | 1.333 |
| 23587 | ELP5 | elongator acetyltransferase complex subunit 5 | 0.485 | 1.539 |
| 1366 | CLDN7 | claudin 7 | -1.402 | 1.718 |
| 1984 | EIF5A | eukaryotic translation initiation factor 5A | -0.48 | 1.754 |
| 9744 | ACAP1 | ArfGAP with coiled-coil, ankyrin repeat and PH domains 1 | 1.992 | 12.645 |
| 147040 | KCTD11 | potassium channel tetramerization domain containing 11 | -1.264 | 5.177 |
| 8711 | TNK1 | tyrosine kinase non receptor 1 | -1.651 | 4.779 |
| 100529211 | TMEM256-PLSCR3 | TMEM256-PLSCR3 readthrough (NMD candidate) | -1.223 | 8.202 |
| 57048 | PLSCR3 | phospholipid scramblase 3 | -1.449 | 9.676 |
| 57659 | ZBTB4 | zinc finger and BTB domain containing 4 | -1.8 | 6.892 |
| 407977 | TNFSF12-TNFSF13 | TNFSF12-TNFSF13 readthrough | -1.046 | 9.301 |
| 8742 | TNFSF12 | TNF superfamily member 12 | -1.622 | 3.72 |
| 8741 | TNFSF13 | TNF superfamily member 13 | -0.934 | 7.838 |
| 968 | CD68 | CD68 molecule | -2.046 | 17.085 |
| 100996842 | LOC100996842 | uncharacterized LOC100996842 | -1.465 | 7.53 |
| 112483 | SAT2 | spermidine/spermine N1-acetyltransferase family member 2 | -1.226 | 4.057 |
| 7157 | TP53 | tumor protein p53 | -1.801 | 10.378 |
| 9196 | KCNAB3 | potassium voltage-gated channel subfamily A regulatory beta subunit 3 | 1.357 | 2.155 |
| 58485 | TRAPP C1 | trafficking protein particle complex subunit 1 | 0.575 | 3.001 |
| 116840 | CNTROB | centrobin, centriole duplication and spindle assembly protein | 1.362 | 12.191 |
| 84314 | TMEM107 | transmembrane protein 107 | 0.756 | 2.801 |
| 9212 | AURKB | aurora kinase B | 2.866 | 4.049 |
| 80169 | CTC1 | CST telomere replication complex component 1 | 0.457 | 1.628 |
| 5198 | PFAS | phosphoribosylformylglycinamide synthase | -0.671 | 1.746 |
| 6154 | RPL26 | ribosomal protein L26 | -0.743 | 2.225 |
| 643904 | RNF222 | ring finger protein 222 | 3.992 | 4.161 |
| 81565 | NDEL1 | nude neurodevelopment protein 1 like 1 | 0.973 | 4.119 |
| 112268195 | LOC112268195 | | 1.325 | 2.627 |
| 101928235 | PIK3R5-DT | PIK3R5 divergent transcript | 0.839 | 1.956 |
| 6341 | SCO1 | synthesis of cytochrome C oxidase 1 | -0.654 | 2.255 |
| 60528 | ELAC2 | elaC ribonuclease Z 2 | -0.398 | 2.398 |
| 1352 | COX10 | cytochrome c oxidase assembly factor heme A:farnesyltransferase COX10 | -0.677 | 1.583 |
| 9953 | HS3ST3B1 | heparan sulfate-glucosamine 3-sulfotransferase 3B1 | 1.402 | 2.895 |
| 5376 | PMP22 | peripheral myelin protein 22 | -3.364 | 4.434 |
| 100533496 | TVP23C-CDRT4 | TVP23C-CDRT4 readthrough | 1.087 | 2.125 |
| 284040 | CDRT4 | CMT1A duplicated region transcript 4 | 1.276 | 1.966 |
| 201158 | TVP23C | trans-golgi network vesicle protein 23 homolog C | 1.011 | 5.245 |
| 374286 | FBXW10B | F-box and WD repeat domain containing 10B | 2.019 | 1.385 |
| 10626 | TRIM16 | tripartite motif containing 16 | 2.134 | 7.332 |
| 57335 | ZNF286A | zinc finger protein 286A | -1.043 | 1.63 |
| 4213 | MEIS3P1 | Meis homeobox 3 pseudogene 1 | -2.677 | 2.77 |
| 54902 | TTC19 | tetratricopeptide repeat domain 19 | -0.61 | 2.558 |
| 125144 | SNHG29 | small nucleolar RNA host gene 29 | 1.341 | 6.374 |
| 692087 | SNORD49B | small nucleolar RNA, C/D box 49B | 2.137 | 9.535 |
| 26800 | SNORD49A | small nucleolar RNA, C/D box 49A | 2.381 | 4.098 |
| 692106 | SNORD65 | small nucleolar RNA, C/D box 65 | 2.596 | 2.914 |
| 388341 | LRRC75A | leucine rich repeat containing 75A | 1.359 | 4.742 |
| 96597 | TBC1D27P | TBC1 domain family member 27, pseudogene | -6.263 | 4.735 |
| 8533 | COPS3 | COP9 signalosome subunit 3 | 0.537 | 1.695 |
| 10400 | PEMT | phosphatidylethanolamine N-methyltransferase | -1.112 | 2.825 |
| 10743 | RAI1 | retinoic acid induced 1 | -0.728 | 2.094 |
| 6720 | SREBF1 | sterol regulatory element binding transcription factor 1 | -0.814 | 1.893 |
| 83450 | DRC3 | dynein regulatory complex subunit 3 | -1.074 | 3.05 |
| 79018 | GID4 | GID complex subunit 4 homolog | -0.592 | 2.351 |
| 1819 | DRG2 | developmentally regulated GTP binding protein 2 | -0.481 | 1.546 |
| 3996 | LLGL1 | LLGL scribble cell polarity complex component 1 | -0.781 | 3.677 |
| 400579 | LINC02076 | long intergenic non-protein coding RNA 2076 | 1.818 | 1.613 |
| 125206 | SLC5A10 | solute carrier family 5 member 10 | 0.883 | 1.584 |
| 644815 | FAM83G | family with sequence similarity 83 member G | 0.761 | 1.39 |
| 10750 | GRAP | GRB2 related adaptor protein | -1.511 | 3.132 |
| 400581 | GRAPL | GRB2 related adaptor protein like | -2.038 | 3.883 |
| 27077 | B9D1 | B9 domain containing 1 | -1.308 | 1.636 |
| 105371573 | LOC105371573 | uncharacterized LOC105371573 | -1.365 | 1.412 |
| 5598 | MAPK7 | mitogen-activated protein kinase 7 | -1.253 | 6.44 |
| 4239 | MFAP4 | microfibril associated protein 4 | -1.348 | 2.908 |
| 9706 | ULK2 | unc-51 like autophagy activating kinase 2 | -2.574 | 32.021 |
| 92521 | SPECC1 | sperm antigen with calponin homology and coiled-coil domains 1 | -1.855 | 6.352 |
| 284194 | LGALS9B | galectin 9B | -1.679 | 1.644 |
| 8834 | TMEM11 | transmembrane protein 11 | 0.678 | 2.448 |
| 256302 | NATD1 | N-acetyltransferase domain containing 1 | 1.693 | 5.972 |
| 5606 | MAP2K3 | mitogen-activated protein kinase kinase 3 | 0.578 | 1.508 |
| 8844 | KSR1 | kinase suppressor of ras 1 | -1.434 | 6.611 |
| 3965 | LGALS9 | galectin 9 | -2.535 | 12.36 |
| 102724517 | LOC102724517 | uncharacterized LOC102724517 | 1.776 | 3.689 |
| 27346 | TMEM97 | transmembrane protein 97 | 1.253 | 3.652 |
| 90410 | IFT20 | intraflagellar transport 20 | 1.483 | 6.249 |
| 7126 | TNFAIP1 | TNF alpha induced protein 1 | 0.459 | 1.783 |
| 23098 | SARM1 | sterile alpha and TIR motif containing 1 | -2.499 | 14.911 |
| 113235 | SLC46A1 | solute carrier family 46 member 1 | -2.702 | 14.731 |
| 9094 | UNC119 | unc-119 lipid binding chaperone | -0.87 | 1.954 |
| 10615 | SPAG5 | sperm associated antigen 5 | 2.648 | 4.545 |
| 100506436 | SPAG5-AS1 | SPAG5 antisense RNA 1 | -0.432 | 1.453 |
| 9703 | BLTP2 | bridge-like lipid transfer protein family member 2 | -0.52 | 3.315 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 6388 | SDF2 | stromal cell derived factor 2 | 0.674 | 2.992 |
| 83871 | RAB34 | RAB34, member RAS oncogene family | -1.33 | 2.91 |
| 6147 | RPL23A | ribosomal protein L23a | -0.874 | 3.875 |
| 284086 | NEK8 | NIMA related kinase 8 | -0.882 | 2.886 |
| 9618 | TRAF4 | TNF receptor associated factor 4 | -2.443 | 6.985 |
| 26284 | ERAL1 | Era like 12S mitochondrial rRNA chaperone 1 | -0.569 | 2.481 |
| 2319 | FLOT2 | flotillin 2 | 1.568 | 11.807 |
| 147015 | DHRS13 | dehydrogenase/reductase 13 | 1.073 | 2.949 |
| 116236 | ABHD15 | abhydrolase domain containing 15 | -1.437 | 10.011 |
| 28964 | GIT1 | GIT ArfGAP 1 | -1.574 | 15.419 |
| 374786 | EFCAB5 | EF-hand calcium binding domain 5 | 2.42 | 11.923 |
| 9527 | GOSR1 | golgi SNAP receptor complex member 1 | -0.343 | 1.303 |
| 440423 | SUZ12P1 | SUZ12 pseudogene 1 | 0.65 | 2.206 |
| 79915 | ATAD5 | ATPase family AAA domain containing 5 | 1.898 | 2.439 |
| 55803 | ADAP2 | ArfGAP with dual PH domains 2 | -2.182 | 7.645 |
| 84282 | RNF135 | ring finger protein 135 | -1.228 | 4.985 |
| 503645 | DPRXP4 | divergent-paired related homeobox pseudogene 4 | -1.274 | 2.832 |
| 107984974 | LOC107984974 | SMAD specific E3 ubiquitin protein ligase 2 (SMURF2) pseudogene | -0.654 | 3.813 |
| 4974 | OMG | oligodendrocyte myelin glycoprotein | 1.23 | 1.736 |
| 2123 | EVI2A | ecotropic viral integration site 2A | -1.487 | 3.997 |
| 55813 | UTP6 | UTP6 small subunit processome component | -0.832 | 2.887 |
| 23512 | SUZ12 | SUZ12 polycomb repressive complex 2 subunit | 0.82 | 1.834 |
| 114659 | LRRC37B | leucine rich repeat containing 37B | 0.89 | 3.467 |
| 6458 | SH3GL1P1 | SH3 domain containing GRB2 like 1, endophilin A2 pseudogene 1 | 1.164 | 2.831 |
| 7756 | ZNF207 | zinc finger protein 207 | 0.624 | 2.312 |
| 8851 | CDK5R1 | cyclin dependent kinase 5 regulatory subunit 1 | 1.117 | 1.484 |
| 10693 | CCT6B | chaperonin containing TCP1 subunit 6B | 1.315 | 1.799 |
| 3980 | LIG3 | DNA ligase 3 | 1.071 | 4.065 |
| 117584 | RFFL | ring finger and FYVE like domain containing E3 ubiquitin protein ligase | 0.79 | 5.474 |
| 100529207 | RAD51L3-RFFL | RAD51L3-RFFL readthrough | 0.791 | 5.073 |
| 5892 | RAD51D | RAD51 paralog D | 1.723 | 4.105 |
| 54475 | NLE1 | notchless homolog 1 | -1.157 | 2.258 |
| 105371932 | LOC105371932 | uncharacterized LOC105371932 | -2.154 | 3.656 |
| 162394 | SLFN5 | schlafin family member 5 | -3.655 | 10.73 |
| 91607 | SLFN11 | schlafin family member 11 | -1.211 | 4.293 |
| 105371933 | LOC105371933 | uncharacterized LOC105371933 | -1.768 | 3.84 |
| 55106 | SLFN12 | schlafin family member 12 | -1.3 | 1.57 |
| 146857 | SLFN13 | schlafin family member 13 | 2.488 | 5.054 |
| 107985032 | LOC107985032 | | 2.306 | 1.428 |
| 6348 | CCL3 | C-C motif chemokine ligand 3 | -2.997 | 3.151 |
| 414062 | CCL3L3 | C-C motif chemokine ligand 3 like 3 | -4.719 | 3.401 |
| 102724862 | TBC1D3I | TBC1 domain family member 3I | 0.841 | 1.758 |
| 729877 | TBC1D3H | TBC1 domain family member 3H | 0.738 | 1.35 |
| 80179 | MYO19 | myosin XIX | 0.736 | 1.71 |
| 79893 | GGNBP2 | gametogenetin binding protein 2 | 1.074 | 2.736 |
| 79154 | DHRS11 | dehydrogenase/reductase 11 | -1.813 | 3.528 |
| 101060351 | TBC1D3K | TBC1 domain family member 3K | 0.712 | 1.448 |
| 101060389 | TBC1D3D | TBC1 domain family member 3D | 0.688 | 1.489 |
| 101929950 | LOC101929950 | puromycin-sensitive aminopeptidase-like protein | 1.021 | 3.836 |
| 102723859 | TBC1D3E | TBC1 domain family member 3E | 0.921 | 4.689 |
| 440434 | NPEPPSP1 | NPEPPS pseudogene 1 | 0.899 | 6.207 |
| 30837 | SOC57 | suppressor of cytokine signaling 7 | -0.987 | 3.311 |
| 4302 | MLLT6 | MLLT6, PHD finger containing | -0.661 | 1.376 |
| 284106 | CISD3 | CDGSH iron sulfur domain 3 | -1.246 | 5.006 |
| 7703 | PCGF2 | polycomb group ring finger 2 | -1.474 | 3.281 |
| 8396 | PIP4K2B | phosphatidylinositol-5-phosphate 4-kinase type 2 beta | -0.459 | 1.615 |
| 54883 | CWC25 | CWC25 spliceosome associated protein homolog | 0.827 | 1.918 |
| 3927 | LASP1 | LIM and SH3 protein 1 | 0.906 | 6.792 |
| 100505576 | LINC00672 | long intergenic non-protein coding RNA 672 | 0.927 | 3.132 |
| 57125 | PLXDC1 | plexin domain containing 1 | -2.583 | 2.225 |
| 782 | CACNB1 | calcium voltage-gated channel auxiliary subunit beta 1 | -2.962 | 10.684 |
| 6143 | RPL19 | ribosomal protein L19 | -0.784 | 2.768 |
| 93210 | PGAP3 | post-GPI attachment to proteins phospholipase 3 | -1.482 | 5.228 |
| 22806 | IKZF3 | IKAROS family zinc finger 3 | -3.13 | 2.218 |
| 5709 | PSMD3 | proteasome 26S subunit, non-ATPase 3 | -0.331 | 1.428 |
| 7067 | THRA | thyroid hormone receptor alpha | 0.916 | 4.351 |
| 339287 | MSL1 | MSL complex subunit 1 | 1.191 | 5.896 |
| 22794 | CASC3 | CASC3 exon junction complex subunit | 0.434 | 1.334 |
| 147179 | WIFP2 | WAS/WASL interacting protein family member 2 | 0.61 | 2.914 |
| 990 | CDC6 | cell division cycle 6 | 3.01 | 1.434 |
| 125111 | GJD3 | gap junction protein delta 3 | -1.634 | 2.704 |
| 7153 | TOP2A | DNA topoisomerase II alpha | 3.45 | 1.964 |
| 1236 | CCR7 | C-C motif chemokine receptor 7 | -5.364 | 5.781 |
| 25984 | KRT23 | keratin 23 | 2.652 | 4.463 |
| 107985072 | LOC107985072 | uncharacterized LOC107985072 | 2.569 | 2.396 |
| 100505753 | KRTAP16-1 | keratin associated protein 16-1 | 4.615 | 4.621 |
| 10209 | EIF1 | eukaryotic translation initiation factor 1 | 0.557 | 1.822 |
| 3728 | JUP | junction plakoglobin | -6.705 | 16.32 |
| 115024 | NT5C3B | 5'-nucleotidase, cytosolic IIIB | -4.123 | 6.291 |
| 1267 | CNP | 2',3'-cyclic nucleotide 3' phosphodiesterase | -1.006 | 3.772 |
| 28511 | NKIRAS2 | NFKB inhibitor interacting Ras like 2 | -0.377 | 1.699 |
| 79132 | DHX58 | DExH-box helicase 58 | -2.255 | 4.474 |
| 2648 | KAT2A | lysine acetyltransferase 2A | -1.485 | 7.685 |
| 6777 | STAT5B | signal transducer and activator of transcription 5B | 0.917 | 3.694 |
| 6774 | STAT3 | signal transducer and activator of transcription 3 | 0.823 | 3.111 |
| 284119 | CAVIN1 | caveolae associated protein 1 | 5.244 | 4.703 |
| 29893 | PSMC3IP | PSMC3 interacting protein | 0.635 | 2.269 |
| 7283 | TUBG1 | tubulin gamma 1 | 1.306 | 4.786 |
| 84313 | VPS25 | vacuolar protein sorting 25 homolog | 0.476 | 1.64 |
| 124817 | CNTD1 | cyclin N-terminal domain containing 1 | -0.561 | 2.414 |
| 8678 | BECN1 | beclin 1 | -0.611 | 2.953 |
| 314 | AOC2 | amine oxidase copper containing 2 | 1.358 | 1.41 |
| 8639 | AOC3 | amine oxidase copper containing 3 | 1.658 | 2.388 |
| 388387 | LINC00671 | long intergenic non-protein coding RNA 671 | 4.04 | 15.784 |
| 100885848 | PTGES3L | prostaglandin E synthase 3 like | 2.049 | 1.678 |
| 3430 | IFI35 | interferon induced protein 35 | -1.156 | 1.686 |
| 10493 | VAT1 | vesicle amine transport 1 | 2.04 | 5.419 |
| 672 | BRCA1 | BRCA1 DNA repair associated | 1.77 | 2.582 |
| 10230 | NBR2 | neighbor of BRCA1 lncRNA 2 | 0.634 | 1.391 |
| 101929767 | LOC101929767 | uncharacterized LOC101929767 | 1.081 | 1.664 |
| 4077 | NBR1 | NBR1 autophagy cargo receptor | -0.641 | 1.327 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|---------------------------|---|----------|----------|
| 113277 | TMEM106A | transmembrane protein 106A | -2.075 | 14.421 |
| 100874261 | CCDC200 | coiled-coil domain containing 200 | -1.994 | 5.298 |
| 379 | ARL4D | ADP ribosylation factor like GTPase 4D | -2.33 | 1.544 |
| 1845 | DUSP3 | dual specificity phosphatase 3 | -1.53 | 8.276 |
| 4356 | MPP3 | MAGUK p55 scaffold protein 3 | -1.491 | 1.418 |
| 162417 | NAGS | N-acetylglutamate synthase | -2.135 | 1.517 |
| 84336 | TMEM101 | transmembrane protein 101 | -0.793 | 3.245 |
| 92579 | G6PC3 | glucose-6-phosphatase catalytic subunit 3 | -0.594 | 2.452 |
| 78995 | HROB | homologous recombination factor with OB-fold | 2.55 | 4.826 |
| 79089 | TMUB2 | transmembrane and ubiquitin like domain containing 2 | 0.582 | 2.723 |
| 101926967 | ATXN7L3-AS1 | ATXN7L3 antisense RNA 1 | 0.872 | 3.008 |
| 51629 | SLC25A39 | solute carrier family 25 member 39 | -0.619 | 2.604 |
| 23131 | GPATCH8 | G-patch domain containing 8 | -0.512 | 2.854 |
| 2535 | FZD2 | frizzled class receptor 2 | -3.259 | 12.323 |
| 80174 | DBF4B | DBF4 zinc finger B | 0.915 | 1.481 |
| 9343 | EFTUD2 | elongation factor Tu GTP binding domain containing 2 | -0.42 | 2.091 |
| 146909 | KIF18B | kinesin family member 18B | 3.163 | 1.646 |
| 4836 | NMT1 | N-myristoyltransferase 1 | -0.742 | 3.444 |
| 113026 | PLCD3 | phospholipase C delta 3 | 1.015 | 2.858 |
| 79777 | ACBD4 | acyl-CoA binding domain containing 4 | 0.56 | 1.673 |
| 10614 | HEXIM1 | HEXIM P-TEFb complex subunit 1 | 0.846 | 3.477 |
| 9020 | MAP3K14 | mitogen-activated protein kinase kinase kinase 14 | -2.121 | 7.884 |
| 201176 | ARHGAP27 | Rho GTPase activating protein 27 | -0.526 | 2.12 |
| 9842 | PLEKHM1 | pleckstrin homology and RUN domain containing M1 | 0.485 | 1.972 |
| 100423004 | MIR4315-1 | microRNA 4315-1 | 0.739 | 1.905 |
| 105369225 | LOC105369225 | uncharacterized LOC105369225 | 1.258 | 3.087 |
| 55073 | LRRC37A4P | leucine rich repeat containing 37 member A4, pseudogene | 1.413 | 2.397 |
| 147081 | LINC02210 | long intergenic non-protein coding RNA 2210 | -3.082 | 3.687 |
| 644246 | KANSL1-AS1 | KANSL1 antisense RNA 1 | -1.699 | 2.233 |
| 100506084 | ARL17B | ADP ribosylation factor like GTPase 17B | 0.8 | 2.523 |
| 107987254 | LOC107987254 | | 0.927 | 2.62 |
| 51326 | ARL17A | ADP ribosylation factor like GTPase 17A | 0.985 | 3.02 |
| 644297 | FAM215B | family with sequence similarity 215 member B | 0.985 | 2.969 |
| 9570 | GOSR2 | golgi SNAP receptor complex member 2 | -0.4 | 1.475 |
| 101927060 | LOC101927060 | uncharacterized LOC101927060 | -0.555 | 1.491 |
| 9520 | NPEPPS | aminopeptidase puromycin sensitive | 0.704 | 2.465 |
| 112268184 | KPNB1-DT | KPNB1 divergent transcript | 0.68 | 2.29 |
| 9755 | TBKBP1 | TBK1 binding protein 1 | 1.41 | 5.457 |
| 124995 | MRPL10 | mitochondrial ribosomal protein L10 | -0.793 | 2.996 |
| 6668 | SP2 | Sp2 transcription factor | -0.596 | 1.832 |
| 100506325 | SP2-AS1 | SP2 antisense RNA 1 | -1.51 | 2.757 |
| 55163 | PNPO | pyridoxamine 5'-phosphate oxidase | -2.009 | 15.11 |
| 51226 | COPZ2 | COP1 coat complex subunit zeta 2 | -3.178 | 4.366 |
| 8631 | SKAP1 | src kinase associated phosphoprotein 1 | -2.704 | 3.038 |
| 3213 | HOXB3 | homeobox B3 | -4.394 | 4.511 |
| 10241 | CALCOCO2 | calcium binding and coiled-coil domain 2 | -0.648 | 3.278 |
| 65264 | UBE2Z | ubiquitin conjugating enzyme E2 Z | -0.474 | 1.758 |
| 2793 | GNGT2 | G protein subunit gamma transducin 2 | -3.207 | 13.131 |
| 51225 | ABI3 | ABI family member 3 | -3.326 | 19.599 |
| 22834 | ZNF652 | zinc finger protein 652 | -0.646 | 1.846 |
| 5245 | PHB1 | prohibitin 1 | -0.6 | 1.369 |
| 4804 | NGFR | nerve growth factor receptor | -4.193 | 2.854 |
| 1748 | DLX4 | distal-less homeobox 4 | -2.577 | 1.938 |
| 5164 | PDK2 | pyruvate dehydrogenase kinase 2 | -2.152 | 10.089 |
| 84687 | PPP1R9B | protein phosphatase 1 regulatory subunit 9B | -1.172 | 3.74 |
| 105371822 | LOC105371822 | uncharacterized LOC105371822 | 2.854 | 1.318 |
| 162461 | TMEM92 | transmembrane protein 92 | 2.582 | 1.388 |
| 103752589 | TMEM92-AS1 | TMEM92 antisense RNA 1 | 2.875 | 3.291 |
| 146956 | EME1 | essential meiotic structure-specific endonuclease 1 | 0.924 | 1.616 |
| 80221 | ACSF2 | acyl-CoA synthetase family member 2 | -1.667 | 3.69 |
| 64847 | SPATA20 | spermatogenesis associated 20 | -1.142 | 1.831 |
| 8714 | ABCC3 | ATP binding cassette subfamily C member 3 | -2.124 | 4.892 |
| 654364 | NME1-NME2 | NME1-NME2 readthrough | -1.193 | 2.792 |
| 4831 | NME2 | NME/NM23 nucleoside diphosphate kinase 2 | -1.264 | 2.873 |
| 23531 | MMD | monocyte to macrophage differentiation associated | -1.231 | 1.913 |
| 8526 | DGKE | diacylglycerol kinase epsilon | -1.114 | 2.398 |
| 246754 | MTVR2 | mouse mammary tumor virus receptor homolog 2 | -2.039 | 1.846 |
| 8165 | AKAP1 | A-kinase anchoring protein 1 | -0.935 | 2.73 |
| 124540 | MSI2 | musashi RNA binding protein 2 | -0.673 | 1.377 |
| 107984993 | LOC107984993 | uncharacterized LOC107984993 | -1.994 | 2.007 |
| 7716 | VEZF1 | vascular endothelial zinc finger 1 | 0.716 | 2.602 |
| 6426 | SRSF1 | serine and arginine rich splicing factor 1 | 0.445 | 1.739 |
| 4025 | LPO | lactoperoxidase | 2.661 | 3.471 |
| 4353 | MPO | myeloperoxidase | 2.744 | 2.504 |
| 406934 | MIR142 | microRNA 142 | 0.962 | 3.267 |
| 9110 | MTMR4 | myotubularin related protein 4 | 0.863 | 4.514 |
| 5414 | SEPTIN4 | septin 4 | -2.284 | 2.272 |
| 56155 | TEX14 | testis expressed 14, intercellular bridge forming factor | -1.155 | 1.358 |
| 5899 | RAD51C | RAD51 paralog C | 1.202 | 1.5 |
| 284161 | GDPD1 | glycerophosphodiester phosphodiesterase domain containing 1 | -2.269 | 3.772 |
| 388403 | YPEL2 | yippee like 2 | -0.753 | 1.377 |
| 406991 | MIR21 | microRNA 21 | -2.707 | 2.362 |
| 653653 | LOC653653 | adaptor related protein complex 1 subunit sigma 2 pseudogene | -1.496 | 8.573 |
| 100996660 | LOC100996660 | uncharacterized LOC100996660 | 2.51 | 2.968 |
| 762 | CA4 | carbonic anhydrase 4 | 3.115 | 13.101 |
| 83990 | BRIP1 | BRCA1 interacting helicase 1 | 2.541 | 2.853 |
| 26115 | TANC2 | tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 2 | 1.321 | 6.841 |
| 1534 | CYB561 | cytochrome b561 | -2.43 | 16.079 |
| 1636 | ACE | angiotensin I converting enzyme | -3.985 | 4.164 |
| 4215 | MAP3K3 | mitogen-activated protein kinase kinase kinase 3 | -0.709 | 1.441 |
| 729683 | LOC729683 | uncharacterized LOC729683 | -2.025 | 3.601 |
| 92335 | STRADA | STE20 related adaptor alpha | 0.516 | 2.087 |
| 57003 | CCDC47 | coiled-coil domain containing 47 | -0.608 | 2.695 |
| 974 | CD79B | CD79b molecule | -4.101 | 33.165 |
| 92340 | PRR29 | proline rich 29 | -2.94 | 9.906 |
| 3384 | ICAM2 | intercellular adhesion molecule 2 | -3.102 | 15.839 |
| 692227 | SNORD104 | small nucleolar RNA, C/D box 104 | 1.021 | 2.276 |
| 55852 | TEX2 | testis expressed 2 | 2.131 | 7.604 |
| 5175 | PECAM1 | platelet and endothelial cell adhesion molecule 1 | -1.409 | 4.925 |
| 90799 | CEP95 | centrosomal protein 95 | 0.474 | 1.313 |
| 109286553 | ARHGAP27P1-BPTFP1-KPNA2P3 | ARHGAP27P1-BPTFP1-KPNA2P3 readthrough, transcribed pseudogene | 0.79 | 3.625 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 101929240 | LOC101929240 | U5 small nuclear ribonucleoprotein 200 kDa helicase-like | 1.06 | 5.663 |
| 146880 | ARHGAP27P1 | Rho GTPase activating protein 27 pseudogene 1 | 0.646 | 3.126 |
| 440456 | PLEKHM1P1 | pleckstrin homology and RUN domain containing M1 pseudogene 1 | 0.724 | 3.539 |
| 374819 | LRRC37A3 | leucine rich repeat containing 37 member A3 | 0.827 | 1.407 |
| 201283 | AMZ2P1 | AMZ2 pseudogene 1 | -0.921 | 3.085 |
| 9931 | HELZ | helicase with zinc finger | -0.566 | 2.284 |
| 26207 | PITPNC1 | phosphatidylinositol transfer protein cytoplasmic 1 | -1.104 | 2.897 |
| 101928045 | LOC101928045 | uncharacterized LOC101928045 | -1.108 | 2.036 |
| 3838 | KPNA2 | karyopherin subunit alpha 2 | 1.755 | 5.372 |
| 55602 | WIP1 | WD repeat domain, phosphoinositide interacting 1 | 1.07 | 2.341 |
| 10349 | ABCA10 | ATP binding cassette subfamily A member 10 | 2.204 | 2.735 |
| 23461 | ABCA5 | ATP binding cassette subfamily A member 5 | 2.485 | 9.446 |
| 400617 | KCNJ2-AS1 | KCNJ2 antisense RNA 1 | 2.16 | 6.558 |
| 3759 | KCNJ2 | potassium inwardly rectifying channel subfamily J member 2 | 1.832 | 2.363 |
| 6169 | RPL38 | ribosomal protein L38 | -0.877 | 3.688 |
| 85001 | MGC16275 | uncharacterized protein MGC16275 | -3.294 | 6.648 |
| 94015 | TTYH2 | weetzy family member 2 | -3.332 | 22.882 |
| 55890 | GPRC5C | G protein-coupled receptor class C group 5 member C | -2.338 | 2.313 |
| 11314 | CD300A | CD300a molecule | -1.081 | 2.217 |
| 124599 | CD300LB | CD300 molecule like family member b | -2.238 | 4.128 |
| 107985074 | LOC107985074 | uncharacterized LOC107985074 | -1.771 | 5.891 |
| 10871 | CD300C | CD300c molecule | -2.325 | 15.819 |
| 100130520 | CD300H | CD300H molecule (gene/pseudogene) | -2.133 | 2.164 |
| 146723 | CD300LD-AS1 | CD300LD antisense RNA 1 | -1.629 | 1.396 |
| 101928343 | LOC101928343 | uncharacterized LOC101928343 | -2.665 | 3.147 |
| 342510 | CD300E | CD300e molecule | -2.916 | 6.83 |
| 105371894 | LOC105371894 | uncharacterized LOC105371894 | -1.139 | 2.193 |
| 146722 | CD300LF | CD300 molecule like family member f | -0.941 | 5.028 |
| 9368 | NHERF1 | NHERF family PDZ scaffold protein 1 | 0.465 | 1.431 |
| 26151 | NAT9 | N-acetyltransferase 9 (putative) | -1.014 | 3.465 |
| 54868 | TMEM104 | transmembrane protein 104 | -1.368 | 10.588 |
| 2905 | GRIN2C | glutamate ionotropic receptor NMDA type subunit 2C | -0.88 | 1.421 |
| 2232 | FDXR | ferredoxin reductase | -1.021 | 1.411 |
| 23510 | KCTD2 | potassium channel tetramerization domain containing 2 | 0.506 | 2.729 |
| 30833 | NT5C | 5', 3'-nucleotidase, cytosolic | -1.134 | 3.645 |
| 51081 | MRPS7 | mitochondrial ribosomal protein S7 | -0.595 | 2.508 |
| 60386 | SLC25A19 | solute carrier family 25 member 19 | -1.642 | 6.834 |
| 283989 | TSEN54 | tRNA splicing endonuclease subunit 54 | -1.309 | 3.563 |
| 107985023 | LOC107985023 | | -1.273 | 1.479 |
| 80022 | MYO15B | myosin XVB | 0.753 | 2.427 |
| 107985013 | LOC107985013 | uncharacterized LOC107985013 | 1.457 | 2.428 |
| 2584 | GALK1 | galactokinase 1 | -1.046 | 4.106 |
| 201294 | UNC13D | unc-13 homolog D | 1.15 | 11.266 |
| 23558 | WBP2 | WW domain binding protein 2 | 0.708 | 3.319 |
| 201292 | TRIM65 | tripartite motif containing 65 | -0.878 | 3.922 |
| 51 | ACOX1 | acyl-CoA oxidase 1 | 0.774 | 1.71 |
| 114804 | RNF157 | ring finger protein 157 | -3.555 | 5.475 |
| 283991 | UBALD2 | UBA like domain containing 2 | 0.837 | 2.231 |
| 84074 | QRICH2 | glutamine rich 2 | 0.883 | 1.351 |
| 5635 | PRPSAP1 | phosphoribosyl pyrophosphate synthetase associated protein 1 | 1.144 | 4.505 |
| 63893 | UBE2O | ubiquitin conjugating enzyme E2 O | -0.521 | 2.174 |
| 79651 | RHBDF2 | rhomboid 5 homolog 2 | -0.746 | 2.23 |
| 439921 | MXRA7 | matrix remodeling associated 7 | 2.86 | 4.659 |
| 23210 | JMJD6 | jumonji domain containing 6, arginine demethylase and lysine hydroxylase | 1.1 | 1.847 |
| 124512 | METTL23 | methyltransferase like 23 | 0.626 | 3.743 |
| 6427 | SRSF2 | serine and arginine rich splicing factor 2 | 0.837 | 3.504 |
| 693221 | MIR636 | microRNA 636 | 0.789 | 2.138 |
| 79157 | MFSD11 | major facilitator superfamily domain containing 11 | 0.327 | 1.39 |
| 10801 | SEPTIN9 | septin 9 | -1.559 | 16.754 |
| 105371903 | LOC105371903 | uncharacterized LOC105371903 | -1.501 | 3.079 |
| 57690 | TNRC6C | trinucleotide repeat containing adaptor 6C | 0.831 | 2.378 |
| 147138 | TMC8 | transmembrane channel like 8 | 0.936 | 7.346 |
| 9144 | SYNGR2 | synaptogyrin 2 | -0.495 | 2.273 |
| 7083 | TK1 | thymidine kinase 1 | 2.697 | 3.757 |
| 107985050 | LOC107985050 | | 2.244 | 4.634 |
| 332 | BIRC5 | baculoviral IAP repeat containing 5 | 3.424 | 1.862 |
| 7077 | TIMP2 | TIMP metallopeptidase inhibitor 2 | -0.636 | 2.302 |
| 3959 | LGALS3BP | galectin 3 binding protein | -4.508 | 8.958 |
| 124583 | CANT1 | calcium activated nucleotidase 1 | 0.66 | 3.261 |
| 64772 | ENGASE | endo-beta-N-acetylglucosaminidase | -1.195 | 1.815 |
| 146713 | RBFOX3 | RNA binding fox-1 homolog 3 | -1.319 | 1.677 |
| 57332 | CBX8 | chromobox 8 | -1.175 | 1.436 |
| 8535 | CBX4 | chromobox 4 | 1.222 | 4.514 |
| 125058 | TBC1D16 | TBC1 domain family member 16 | -2.32 | 2.829 |
| 2548 | GAA | alpha glucosidase | -1.765 | 3.9 |
| 9775 | EIF4A3 | eukaryotic translation initiation factor 4A3 | 0.91 | 3.647 |
| 79092 | CARD14 | caspase recruitment domain family member 14 | -1.54 | 1.337 |
| 6448 | SGSH | N-sulfoglucosamine sulfhydrolase | -1.528 | 2.368 |
| 284129 | SLC26A11 | solute carrier family 26 member 11 | -1.422 | 1.777 |
| 57674 | RNF213 | ring finger protein 213 | -1.861 | 4.258 |
| 100294362 | RNF213-AS1 | RNF213 antisense RNA 1 | -1.9 | 4.292 |
| 57521 | RPTOR | regulatory associated protein of MTOR complex 1 | -0.745 | 2.081 |
| 440465 | BAIAP2-DT | BAIAP2 divergent transcript | -1.183 | 1.608 |
| 10458 | BAIAP2 | BAR/IMD domain containing adaptor protein 2 | -1.475 | 3.808 |
| 71 | ACTG1 | actin gamma 1 | 1.3 | 8.838 |
| 25794 | FSCN2 | fasin actin-bundling protein 2, retinal | 1.785 | 2.17 |
| 80233 | FAAP100 | FA core complex associated protein 100 | -0.562 | 1.524 |
| 339230 | CCDC137 | coiled-coil domain containing 137 | 0.689 | 2.468 |
| 6182 | MRPL12 | mitochondrial ribosomal protein L12 | -0.621 | 1.609 |
| 1468 | SLC25A10 | solute carrier family 25 member 10 | 1.908 | 3.786 |
| 5034 | P4HB | prolyl 4-hydroxylase subunit beta | 0.869 | 4.462 |
| 396 | ARHGDI | Rho GDP dissociation inhibitor alpha | 0.465 | 1.489 |
| 4097 | MAFG | MAF bZIP transcription factor G | 1.439 | 5.663 |
| 79058 | ASPSCR1 | ASPSCR1 tether for SLC2A4, UBX domain containing | -0.568 | 1.642 |
| 5881 | RAC3 | Rac family small GTPase 3 | 1.671 | 2.289 |
| 5986 | RFNG | RFNG O-fucosylpeptide 3-beta-N-acetylglucosaminyltransferase | 0.604 | 4.217 |
| 9123 | SLC16A3 | solute carrier family 16 member 3 | 0.711 | 2.049 |
| 924 | CD7 | CD7 molecule | -2.192 | 5.181 |
| 6398 | SECTM1 | secreted and transmembrane 1 | -2.115 | 5.582 |
| 79701 | OGFOD3 | 2-oxoglutarate and iron dependent oxygenase domain containing 3 | -1.173 | 5.999 |
| 284004 | HEXD | hexosaminidase D | -0.717 | 1.761 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 26502 | NARF | nuclear prelamin A recognition factor | 0.803 | 2.557 |
| 3607 | FOXK2 | forkhead box K2 | 0.349 | 1.933 |
| 10966 | RAB40B | RAB40B, member RAS oncogene family | -1.374 | 1.746 |
| 146712 | B3GNTL1 | UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase like 1 | 0.705 | 3.339 |
| 284207 | METRNL | meteordin like, glial cell differentiation regulator | -1.874 | 3.718 |
| 107987251 | LOC107987251 | | -2.406 | 3.267 |
| 727758 | ROCK1P1 | Rho associated coiled-coil containing protein kinase 1 pseudogene 1 | 0.742 | 1.75 |
| 494514 | TYMSOS | TYMS opposite strand RNA | 3.47 | 2.858 |
| 7298 | TYMS | thymidylate synthetase | 3.16 | 1.86 |
| 55556 | ENOSF1 | enolase superfamily member 1 | 2.362 | 3.755 |
| 10403 | NDC80 | NDC80 kinetochore complex component | 2.96 | 2.984 |
| 84034 | EMILIN2 | elastin microfibril interfacer 2 | -1.699 | 9.675 |
| 10627 | MYL12A | myosin light chain 12A | 0.94 | 4.5 |
| 104968399 | MYL12-AS1 | MYL12A and MYL12B antisense RNA 1 | 0.848 | 3.873 |
| 103910 | MYL12B | myosin light chain 12B | 0.595 | 3.312 |
| 7050 | TGIF1 | TGFB induced factor homeobox 1 | -1.566 | 2.276 |
| 339290 | LINC00667 | long intergenic non-protein coding RNA 667 | -1.493 | 6.304 |
| 23136 | EPB41L3 | erythrocyte membrane protein band 4.1 like 3 | -3.522 | 9.324 |
| 91133 | L3MBTL4 | L3MBTL histone methyl-lysine binding protein 4 | -3.094 | 10.596 |
| 201475 | RAB12 | RAB12, member RAS oncogene family | -1.656 | 8.657 |
| 9989 | PPP4R1 | protein phosphatase 4 regulatory subunit 1 | 1.229 | 6.332 |
| 11031 | RAB31 | RAB31, member RAS oncogene family | 1.279 | 5.457 |
| 105371981 | LOC105371981 | uncharacterized LOC105371981 | 0.793 | 1.892 |
| 9218 | VAPA | VAMP associated protein A | 0.743 | 2.025 |
| 147495 | APCDD1 | APC down-regulated 1 | -1.858 | 1.667 |
| 2774 | GNAL | G protein subunit alpha L | 0.943 | 4.583 |
| 65258 | MPPE1 | metallophosphoesterase 1 | 0.868 | 3.804 |
| 3613 | IMPA2 | inositol monophosphatase 2 | 0.751 | 3.238 |
| 10939 | AFG3L2 | AFG3 like matrix AAA peptidase subunit 2 | -0.602 | 2.663 |
| 56907 | SPIRE1 | spire type actin nucleation factor 1 | -1.619 | 4.555 |
| 79959 | CEP76 | centrosomal protein 76 | 1.611 | 3.675 |
| 5771 | PTPN2 | protein tyrosine phosphatase non-receptor type 2 | -0.98 | 8.641 |
| 753 | LDLRAD4 | low density lipoprotein receptor class A domain containing 4 | -0.699 | 2.432 |
| 8731 | RNMT | RNA guanine-7 methyltransferase | -0.469 | 1.454 |
| 6093 | ROCK1 | Rho associated coiled-coil containing protein kinase 1 | 0.615 | 2.717 |
| 171586 | ABHD3 | abhydrolase domain containing 3, phospholipase | -0.798 | 1.628 |
| 57534 | MIB1 | MIB E3 ubiquitin protein ligase 1 | -0.525 | 1.437 |
| 91768 | CABLES1 | Cdk5 and Abl enzyme substrate 1 | 1.255 | 1.41 |
| 85019 | TMEM241 | transmembrane protein 241 | 1.176 | 3.179 |
| 8780 | RIOK3 | RIO kinase 3 | 1.434 | 4.711 |
| 114876 | OSBPL1A | oxysterol binding protein like 1A | 1.189 | 2.381 |
| 6760 | SS18 | SS18 subunit of BAF chromatin remodeling complex | -0.919 | 6.129 |
| 6875 | TAF4B | TATA-box binding protein associated factor 4b | -2.671 | 7.291 |
| 284252 | KCTD1 | potassium channel tetramerization domain containing 1 | -2.547 | 1.911 |
| 54941 | RNF125 | ring finger protein 125 | -0.826 | 2.039 |
| 10982 | MAPRE2 | microtubule associated protein RP/EB family member 2 | -1.368 | 3.865 |
| 84307 | ZNF397 | zinc finger protein 397 | 0.49 | 1.37 |
| 107985139 | LOC107985139 | | -0.83 | 2.023 |
| 7572 | ZNF24 | zinc finger protein 24 | -0.706 | 2.447 |
| 25800 | SLC39A6 | solute carrier family 39 member 6 | -0.785 | 2.282 |
| 55250 | ELP2 | elongator acetyltransferase complex subunit 2 | -0.764 | 2.398 |
| 647946 | MIR924HG | MIR924 host gene | 3.065 | 2.855 |
| 284266 | SIGLEC15 | sialic acid binding Ig like lectin 15 | -1.956 | 1.975 |
| 9050 | PSTPIP2 | proline-serine-threonine phosphatase interacting protein 2 | 1.156 | 3.866 |
| 147339 | C18orf25 | chromosome 18 open reading frame 25 | 0.685 | 1.981 |
| 125336 | LOXHD1 | lipoxygenase homology PLAT domains 1 | 1.923 | 1.5 |
| 9811 | CTIF | cap binding complex dependent translation initiation factor | -0.837 | 1.884 |
| 497661 | C18orf32 | chromosome 18 open reading frame 32 | 0.657 | 2.15 |
| 4152 | MBD1 | methyl-CpG binding domain protein 1 | 0.515 | 2.665 |
| 30827 | CXXC1 | CXXC finger protein 1 | 0.56 | 2.124 |
| 220134 | SKA1 | spindle and kinetochore associated complex subunit 1 | 4.184 | 2.643 |
| 105372118 | LOC105372118 | replaced by ID 51320 | 0.704 | 1.583 |
| 8932 | MBD2 | methyl-CpG binding domain protein 2 | -0.483 | 1.319 |
| 6925 | TCF4 | transcription factor 4 | -1.606 | 5.396 |
| 9352 | TXNL1 | thioredoxin like 1 | 0.525 | 1.497 |
| 23335 | WDR7 | WD repeat domain 7 | -0.407 | 1.412 |
| 2235 | FECH | ferrochelatase | -0.86 | 1.677 |
| 4677 | NARS1 | asparaginyl-tRNA synthetase 1 | -1.062 | 7.399 |
| 100505549 | ATP8B1-AS1 | ATP8B1 antisense RNA 1 | -2.07 | 8.59 |
| 5205 | ATP8B1 | ATPase phospholipid transporting 8B1 | -2.348 | 7.401 |
| 105372141 | LOC105372141 | uncharacterized LOC105372141 | -2.463 | 7.919 |
| 23327 | NEDD4L | NEDD4 like E3 ubiquitin protein ligase | -2.049 | 4.651 |
| 115701 | ALPK2 | alpha kinase 2 | -3.601 | 3.394 |
| 101927322 | MALT1-AS1 | MALT1 antisense RNA 1 | -1.793 | 3.32 |
| 10892 | MALT1 | MALT1 paracaspase | -1.443 | 9.944 |
| 105372146 | LOC105372146 | uncharacterized LOC105372146 | -2.275 | 5.17 |
| 55205 | ZNF532 | zinc finger protein 532 | -3.467 | 5.595 |
| 5366 | PMAIP1 | phorbol-12-myristate-13-acetate-induced protein 1 | -1.634 | 5.666 |
| 54877 | ZCCHC2 | zinc finger CCHC-type containing 2 | -1.232 | 1.717 |
| 23239 | PHLPP1 | PH domain and leucine rich repeat protein phosphatase 1 | 2.058 | 7.666 |
| 596 | BCL2 | BCL2 apoptosis regulator | -1.537 | 3.527 |
| 2531 | KDSR | 3-ketodihydroxyngosine reductase | -1.799 | 9.861 |
| 9525 | VPS4B | vacuolar protein sorting 4 homolog B | 0.962 | 3.299 |
| 5055 | SERPINB2 | serpin family B member 2 | 2.912 | 3.27 |
| 5273 | SERPINB10 | serpin family B member 10 | 4.137 | 5.646 |
| 5271 | SERPINB8 | serpin family B member 8 | -0.855 | 2.477 |
| 1528 | CYB5A | cytochrome b5 type A | -1.671 | 4.575 |
| 55748 | CNDP2 | carnosine dipeptidase 2 | -2.014 | 24.336 |
| 55628 | ZNF407 | zinc finger protein 407 | 0.457 | 1.465 |
| 10194 | TSHZ1 | teashirt zinc finger homeobox 1 | -1.541 | 4.757 |
| 9658 | ZNF516 | zinc finger protein 516 | 0.448 | 1.488 |
| 4772 | NFATC1 | nuclear factor of activated T cells 1 | -1.804 | 18.276 |
| 101927897 | LOC101927897 | uncharacterized LOC101927897 | -1.786 | 4.574 |
| 399844 | LINC01002 | long intergenic non-protein coding RNA 1002 | 2.181 | 12.753 |
| 101928344 | LOC101928344 | uncharacterized LOC101928344 | 1.178 | 3.692 |
| 54531 | MIER2 | MIER family member 2 | -2.047 | 3.955 |
| 3004 | GZMM | granzyme M | -1.542 | 1.617 |
| 105372233 | BSG-AS1 | BSG antisense RNA 1 | 3.389 | 7.015 |
| 610 | HCN2 | hyperpolarization activated cyclic nucleotide gated potassium and sodium channel 2 | -2.966 | 2.176 |
| 5442 | POLRMT | RNA polymerase mitochondrial | -0.657 | 1.852 |
| 10272 | FSTL3 | follistatin like 3 | 2.606 | 5.818 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 400668 | PRSS57 | serine protease 57 | 2.846 | 4.674 |
| 566 | AZU1 | azurocidin 1 | 3.736 | 4.628 |
| 5657 | PRTN3 | protease 3 | 4.264 | 3.537 |
| 1991 | ELANE | elastase, neutrophil expressed | 3.148 | 1.774 |
| 1675 | CFD | complement factor D | -1.594 | 1.81 |
| 101954271 | RNU6-9 | RNA, U6 small nuclear 9 | 1.821 | 1.905 |
| 91300 | R3HDM4 | R3H domain containing 4 | 1.175 | 3.72 |
| 1820 | ARID3A | AT-rich interaction domain 3A | 0.652 | 2.543 |
| 57418 | WDR18 | WD repeat domain 18 | -1.168 | 3.248 |
| 1265 | CNN2 | calponin 2 | 1.525 | 14.119 |
| 10347 | ABCA7 | ATP binding cassette subfamily A member 7 | 1.272 | 3.764 |
| 5434 | POLR2E | RNA polymerase II, I and III subunit E | -0.548 | 2.325 |
| 2879 | GPX4 | glutathione peroxidase 4 | -0.736 | 3.161 |
| 6794 | STK11 | serine/threonine kinase 11 | -0.679 | 2.779 |
| 513 | ATP5F1D | ATP synthase F1 subunit delta | -0.538 | 1.686 |
| 55009 | FAM174C | family with sequence similarity 174 member C | -0.812 | 3.461 |
| 84939 | PWWP3A | PWWP domain containing 3A, DNA repair factor | -0.756 | 2.648 |
| 374291 | NDUFS7 | NADH:ubiquinone oxidoreductase core subunit S7 | -0.496 | 1.747 |
| 6209 | RPS15 | ribosomal protein S15 | -0.548 | 2.396 |
| 54760 | PCSK4 | proprotein convertase subtilisin/kexin type 4 | -4.289 | 3.512 |
| 92840 | REEP6 | receptor accessory protein 6 | -2.075 | 2.185 |
| 399664 | MEX3D | mex-3 RNA binding family member D | -1.377 | 1.603 |
| 6929 | TCF3 | transcription factor 3 | -0.731 | 2.665 |
| 148229 | ATP8B3 | ATPase phospholipid transporting 8B3 | 1.208 | 2.122 |
| 113178 | SCAMP4 | secretory carrier membrane protein 4 | -1.158 | 5.193 |
| 55643 | BTBD2 | BTB domain containing 2 | -0.567 | 1.667 |
| 8943 | AP3D1 | adaptor related protein complex 3 subunit delta 1 | -0.612 | 2.783 |
| 4946 | OAZ1 | ornithine decarboxylase antizyme 1 | 0.352 | 1.654 |
| 374872 | PEAK3 | PEAK family member 3 | 0.978 | 4.283 |
| 645191 | LINGO3 | leucine rich repeat and Ig domain containing 3 | 1.432 | 9.327 |
| 101928572 | LOC101928572 | uncharacterized LOC101928572 | 1.605 | 3.565 |
| 360200 | TMPRSS9 | transmembrane serine protease 9 | -1.398 | 1.761 |
| 26517 | TIMM13 | translocase of inner mitochondrial membrane 13 | -0.665 | 1.409 |
| 2788 | GNG7 | G protein subunit gamma 7 | 1.89 | 3.283 |
| 148254 | ZNF555 | zinc finger protein 555 | -1.7 | 4.019 |
| 166 | TLE5 | TLE family member 5, transcriptional modulator | -1.161 | 16.911 |
| 2767 | GNA11 | G protein subunit alpha 11 | -1.943 | 11.486 |
| 2769 | GNA15 | G protein subunit alpha 15 | -0.406 | 1.39 |
| 8698 | S1PR4 | sphingosine-1-phosphate receptor 4 | 1.488 | 8.914 |
| 56926 | NCLN | ncalnin | 0.525 | 2.255 |
| 284422 | SMIM24 | small integral membrane protein 24 | 2.419 | 2.897 |
| 105372246 | LOC105372246 | uncharacterized LOC105372246 | 2.259 | 2.834 |
| 83475 | DOHH | deoxyhypusine hydroxylase | 0.772 | 2.076 |
| 105372245 | LOC105372245 | uncharacterized LOC105372245 | 1.985 | 5.65 |
| 51343 | FZR1 | fizzy and cell division cycle 20 related 1 | 0.665 | 1.851 |
| 126321 | MFSD12 | major facilitator superfamily domain containing 12 | -0.732 | 3.113 |
| 23396 | PIP5K1C | phosphatidylinositol-4-phosphate 5-kinase type 1 gamma | -1.259 | 7.438 |
| 5605 | MAP2K2 | mitogen-activated protein kinase kinase 2 | 0.587 | 3.833 |
| 84954 | MPND | MPN domain containing | -0.538 | 1.369 |
| 6455 | SH3GL1 | SH3 domain containing GRB2 like 1, endophilin A2 | 0.436 | 1.405 |
| 10036 | CHAF1A | chromatin assembly factor 1 subunit A | 0.814 | 1.881 |
| 107985297 | LOC107985297 | replaced by ID 10036 | 2.173 | 3.299 |
| 729359 | PLIN4 | perilipin 4 | 2.575 | 7.96 |
| 440503 | PLIN5 | perilipin 5 | 3.487 | 10.55 |
| 116844 | LRG1 | leucine rich alpha-2-glycoprotein 1 | 2.745 | 8.534 |
| 10501 | SEMA6B | semaphorin 6B | 1.383 | 1.659 |
| 126282 | TNFAIP8L1 | TNF alpha induced protein 8 like 1 | -1.629 | 6.717 |
| 148022 | TICAM1 | TIR domain containing adaptor molecule 1 | -1.175 | 4.159 |
| 645432 | ARRDC5 | arrestin domain containing 5 | 1.141 | 4.545 |
| 29128 | UHRF1 | ubiquitin like with PHD and ring finger domains 1 | 2.632 | 4.66 |
| 5802 | PTPRS | protein tyrosine phosphatase receptor type S | 2.66 | 2.492 |
| 25873 | RPL36 | ribosomal protein L36 | -0.766 | 4.149 |
| 9361 | LONP1 | lon peptidase 1, mitochondrial | -0.633 | 3.936 |
| 56931 | DUS3L | dihydrouridine synthase 3 like | -0.638 | 1.965 |
| 828 | CAPS | calcyphosine | 0.508 | 2.153 |
| 100128568 | RANBP3-DT | RANBP3 divergent transcript | 1.674 | 1.86 |
| 5990 | RFX2 | regulatory factor X2 | 1.409 | 3.708 |
| 79085 | SLC25A23 | solute carrier family 25 member 23 | -2.567 | 2.231 |
| 8744 | TNFSF9 | TNF superfamily member 9 | -4.102 | 5.129 |
| 8740 | TNFSF14 | TNF superfamily member 14 | 2.035 | 3.176 |
| 718 | C3 | complement C3 | -1.958 | 3.299 |
| 2015 | ADGRE1 | adhesion G protein-coupled receptor E1 | -0.929 | 1.429 |
| 140467 | ZNF358 | zinc finger protein 358 | -2.943 | 3.653 |
| 57192 | MCOLN1 | mucolipin TRP cation channel 1 | -1.066 | 4.227 |
| 10908 | PNPLA6 | patatin like phospholipase domain containing 6 | -0.993 | 5.842 |
| 56729 | RETN | resistin | 3.371 | 2.329 |
| 199675 | MCEMP1 | mast cell expressed membrane protein 1 | 2.795 | 8.74 |
| 2208 | FCER2 | Fc epsilon receptor II | -1.744 | 2.429 |
| 339390 | CLEC4G | C-type lectin domain family 4 member G | -2.092 | 6.226 |
| 30835 | CD209 | CD209 molecule | -3.874 | 6.79 |
| 6618 | SNAPC2 | small nuclear RNA activating complex polypeptide 2 | -0.369 | 1.357 |
| 10469 | TIMM44 | translocase of inner mitochondrial membrane 44 | -0.636 | 2.826 |
| 6234 | RPS28 | ribosomal protein S28 | -0.649 | 3.133 |
| 84106 | PRAM1 | PML-RARA regulated adaptor molecule 1 | 0.809 | 5.31 |
| 84330 | ZNF414 | zinc finger protein 414 | 0.533 | 1.478 |
| 81794 | ADAMTS10 | ADAM metallopeptidase with thrombospondin type 1 motif 10 | -2.14 | 1.687 |
| 148156 | ZNF558 | zinc finger protein 558 | -0.53 | 1.899 |
| 7675 | ZNF121 | zinc finger protein 121 | -0.65 | 1.491 |
| 59286 | UBL5 | ubiquitin like 5 | 0.876 | 7.15 |
| 55337 | SHFL | shiftless antiviral inhibitor of ribosomal frameshifting | -1.219 | 2.676 |
| 83854 | ANGPTL6 | angiopoietin like 6 | -1.339 | 2.822 |
| 56342 | PPAN | peter pan homolog | -1.728 | 4.639 |
| 692312 | PPAN-P2RY11 | PPAN-P2RY11 readthrough | -1.246 | 3.132 |
| 5032 | P2RY11 | purinergic receptor P2Y11 | -1.095 | 2.286 |
| 8666 | EIF3G | eukaryotic translation initiation factor 3 subunit G | -1.087 | 4.066 |
| 9294 | S1PR2 | sphingosine-1-phosphate receptor 2 | -3.057 | 6.044 |
| 51073 | MRPL4 | mitochondrial ribosomal protein L4 | -0.821 | 3.487 |
| 3386 | ICAM4 | intercellular adhesion molecule 4 (Landsteiner-Wiener blood group) | -2.001 | 3.329 |
| 7087 | ICAM5 | intercellular adhesion molecule 5 | -1.67 | 2.742 |
| 100125288 | ZGLP1 | zinc finger GATA like protein 1 | -1.84 | 2.477 |
| 112812 | FDX2 | ferredoxin 2 | -1.395 | 2.1 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 3385 | ICAM3 | intercellular adhesion molecule 3 | 1.493 | 11.172 |
| 5141 | PDE4A | phosphodiesterase 4A | -3.214 | 25.059 |
| 84971 | ATG4D | autophagy related 4D cysteine peptidase | 0.773 | 2.65 |
| 1032 | CDKN2D | cyclin dependent kinase inhibitor 2D | 1.478 | 12.597 |
| 57153 | SLC44A2 | solute carrier family 44 member 2 | 1.074 | 6.893 |
| 81890 | QTRT1 | queueine tRNA-ribosyltransferase catalytic subunit 1 | -1.267 | 3.653 |
| 1785 | DNM2 | dynamin 2 | 0.337 | 1.72 |
| 406976 | MIR199A1 | microRNA 199a-1 | 1.227 | 1.493 |
| 10498 | CARM1 | coactivator associated arginine methyltransferase 1 | -1.349 | 13.131 |
| 115271120 | LDLR-AS1 | LDLR antisense RNA 1 | 1.066 | 1.355 |
| 3949 | LDLR | low density lipoprotein receptor | 1.444 | 3.582 |
| 147841 | SPC24 | SPC24 component of NDC80 kinetochore complex | 3.504 | 4.573 |
| 26526 | TSPAN16 | tetraspanin 16 | 1.844 | 2.452 |
| 105372274 | HSPC102 | uncharacterized HSPC102 | 2.679 | 3.471 |
| 9545 | RAB3D | RAB3D, member RAS oncogene family | 0.517 | 2.225 |
| 374882 | TMEM205 | transmembrane protein 205 | -0.565 | 1.308 |
| 115950 | ZNF653 | zinc finger protein 653 | -1.107 | 1.517 |
| 51295 | ECSIT | ECSIT signaling integrator | -0.795 | 3.319 |
| 84337 | ELOF1 | elongation factor 1 | -0.7 | 2.173 |
| 54 | ACP5 | acid phosphatase 5, tartrate resistant | -1.851 | 3.245 |
| 199692 | ZNF627 | zinc finger protein 627 | -0.753 | 1.38 |
| 55552 | ZNF823 | zinc finger protein 823 | -1.289 | 1.322 |
| 90592 | ZNF700 | zinc finger protein 700 | 0.962 | 4.085 |
| 284390 | ZNF763 | zinc finger protein 763 | 0.806 | 1.517 |
| 101928464 | ZNF433-AS1 | ZNF433 and ZNF878 antisense RNA 1 | 0.676 | 1.416 |
| 388507 | ZNF788P | zinc finger family member 788, pseudogene | 2.686 | 4.443 |
| 105372275 | LOC105372275 | zinc finger protein 443 | 2.746 | 5.168 |
| 10224 | ZNF443 | mannosidase alpha class 2B member 1 | 1.01 | 1.377 |
| 4125 | MAN2B1 | telomerase RNA component interacting RNase | -1.047 | 4.064 |
| 79002 | TRIR | hook microtubule tethering protein 2 | 0.348 | 1.492 |
| 29911 | HOOK2 | microRNA 5684 | 0.672 | 1.456 |
| 100847071 | MIR5684 | JunB proto-oncogene, AP-1 transcription factor subunit | -2.113 | 1.726 |
| 3726 | JUNB | ribonuclease H2 subunit A | 0.833 | 1.515 |
| 10535 | RNASEH2A | microtubule associated serine/threonine kinase 1 | -2.567 | 2.084 |
| 22983 | MAST1 | deoxyribonuclease 2, lysosomal | -2.184 | 4.199 |
| 1777 | DNASE2 | synaptonemal complex central element protein 2 | 1.076 | 2.325 |
| 256126 | SYCE2 | calreticulin | -0.677 | 1.658 |
| 811 | CALR | nuclear factor I X | -2.418 | 8.22 |
| 4784 | NFIX | tRNA methyltransferase 1 | -0.64 | 1.611 |
| 55621 | TRMT1 | break repair meiotic recombinase recruitment factor 1 | 1.924 | 1.803 |
| 79173 | BRME1 | regulatory factor X1 | -0.755 | 2.145 |
| 5989 | RFX1 | interleukin 27 receptor subunit alpha | -2.116 | 11.999 |
| 9466 | IL27RA | MISP family member 3 | 2.659 | 10.947 |
| 113230 | MISP3 | sterile alpha motif domain containing 1 | 0.73 | 1.551 |
| 90378 | SAMD1 | protein kinase cAMP-activated catalytic subunit alpha | -1.037 | 2.962 |
| 5566 | PRKACA | anti-silencing function 1B histone chaperone | 1.808 | 3.382 |
| 55723 | ASF1B | adhesion G protein-coupled receptor L1 | -1.089 | 3.429 |
| 22859 | ADGRL1 | DExD-box helicase 39A | 0.642 | 1.724 |
| 10212 | DDX39A | protein kinase N1 | -0.376 | 1.36 |
| 5585 | PKN1 | GIPC PDZ domain containing family member 1 | -1.874 | 9.055 |
| 10755 | GIPC1 | trans-2,3-enoyl-CoA reductase | 0.797 | 4.165 |
| 9524 | TECR | microRNA 639 | 0.93 | 1.416 |
| 693224 | MIR639 | zinc finger protein 333 | -0.529 | 1.404 |
| 84449 | ZNF333 | adhesion G protein-coupled receptor E2 | -1.087 | 1.475 |
| 30817 | ADGRE2 | epoxide hydrolase 3 | -2.906 | 2.951 |
| 79852 | EPHX3 | RAS protein activator like 3 | 0.899 | 4.806 |
| 64926 | RASAL3 | cytochrome P450 family 4 subfamily F member 22 | -5.652 | 11.193 |
| 126410 | CYP4F22 | cytochrome P450 family 4 subfamily F member 3 | 3.465 | 2.427 |
| 4051 | CYP4F3 | cytochrome P450 family 4 subfamily F member 12 | 5.345 | 16.054 |
| 66002 | CYP4F12 | cytochrome P450 family 4 subfamily F member 2 | 3.579 | 4.554 |
| 8529 | CYP4F2 | tropomyosin 4 | -0.84 | 1.812 |
| 7171 | TPM4 | adaptor related protein complex 1 subunit mu 1 | 0.603 | 4.173 |
| 8907 | AP1M1 | solute carrier family 35 member E1 | -0.599 | 2.46 |
| 79939 | SLC35E1 | mediator complex subunit 26 | 0.883 | 2.128 |
| 9441 | MED26 | transmembrane protein 38A | 2.012 | 6.391 |
| 79041 | TMEM38A | SIN3 transcription regulator family member B | -1.401 | 4.399 |
| 23309 | SIN3B | C3 and PZP like alpha-2-macroglobulin domain containing 8 | -3.319 | 4.3 |
| 27151 | CPAMD8 | occludin/ELL domain containing 1 | -1.157 | 1.805 |
| 79629 | OCEL1 | DET1 and DDB1 associated 1 | 0.526 | 1.892 |
| 79016 | DDA1 | anoctamin 8 | -1.628 | 4.501 |
| 57719 | ANO8 | plasmalemma vesicle associated protein | -2.931 | 2.216 |
| 83483 | PLVAP | bone marrow stromal cell antigen 2 | -1.677 | 4.83 |
| 684 | BST2 | BST2 interferon stimulated positive regulator | -0.98 | 2.206 |
| 105221694 | BISPR | multivesicular body subunit 12A | -0.724 | 2.623 |
| 93343 | MVB12A | solute carrier family 27 member 1 | -2.17 | 3.713 |
| 376497 | SLC27A1 | riban apoptosis regulator 3 | -1.663 | 3.402 |
| 199786 | NIBAN3 | collagen beta(1-O)galactosyltransferase 1 | -0.512 | 2.46 |
| 79709 | COLGALT1 | Janus kinase 3 | 1.168 | 7.222 |
| 3718 | JAK3 | ribosomal protein L18a | -0.999 | 3.903 |
| 6142 | RPL18A | arrestin domain containing 2 | -1.105 | 5.188 |
| 27106 | ARRDC2 | interleukin 12 receptor subunit beta 1 | -2.206 | 12.396 |
| 3594 | IL12RB1 | phosphoinositide-3-kinase regulatory subunit 2 | -1.04 | 5.865 |
| 5296 | PIK3R2 | IFI30 lysosomal thiol reductase | -2.287 | 9.913 |
| 10437 | IFI30 | MPV17 mitochondrial inner membrane protein like 2 | -1.45 | 2.474 |
| 84769 | MPV17L2 | RAB3A, member RAS oncogene family | -2.112 | 2.782 |
| 5864 | RAB3A | uncharacterized LOC105372300 | -1.784 | 3.472 |
| 105372300 | LOC105372300 | leucine rich repeat containing 25 | -1.113 | 3.087 |
| 126364 | LRRC25 | single stranded DNA binding protein 4 | -1.894 | 7.1 |
| 170463 | SSBP4 | CREB regulated transcription coactivator 1 | -1.111 | 4.332 |
| 23373 | CRTC1 | homer scaffold protein 3 | -1.309 | 1.547 |
| 9454 | HOMER3 | HOMER3 antisense RNA 1 | -1.785 | 1.716 |
| 102724360 | HOMER3-AS1 | SURP and G-patch domain containing 2 | 0.369 | 1.904 |
| 10147 | SUGP2 | armadillo repeat containing 6 | -0.589 | 2.343 |
| 93436 | ARMC6 | transmembrane protein 161A | -1.196 | 3.156 |
| 54929 | TMEM161A | BORCS8-MEF2B readthrough | 0.781 | 3.786 |
| 4207 | BORCS8-MEF2B | myocyte enhancer factor 2B | 0.856 | 2.97 |
| 100271849 | MEF2B | BLOC-1 related complex subunit 8 | 0.739 | 3.673 |
| 729991 | BORCS8 | regulatory factor X associated ankyrin containing protein | 0.749 | 3.423 |
| 8625 | RFXANK | cartilage intermediate layer protein 2 | 2.903 | 2.318 |
| 148113 | CILP2 | lysophosphatidic acid receptor 2 | 1.052 | 8.401 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 57130 | ATP13A1 | ATPase 13A1 | -1.348 | 6.147 |
| 7643 | ZNF90 | zinc finger protein 90 | -0.844 | 3.08 |
| 148203 | ZNF738 | zinc finger protein 738 | 1.086 | 2.035 |
| 284443 | ZNF493 | zinc finger protein 493 | 1.906 | 3.682 |
| 105372321 | LOC105372321 | uncharacterized LOC105372321 | 2.258 | 1.316 |
| 400680 | LINC00664 | long intergenic non-protein coding RNA 664 | 2.414 | 2.198 |
| 353088 | ZNF429 | zinc finger protein 429 | 1.03 | 2.053 |
| 7594 | ZNF43 | zinc finger protein 43 | 1.57 | 3.852 |
| 57615 | ZNF492 | zinc finger protein 492 | 5.09 | 3.067 |
| 730087 | ZNF726 | zinc finger protein 726 | 1.882 | 1.913 |
| 9534 | ZNF254 | zinc finger protein 254 | 1.627 | 4.862 |
| 79156 | PLEKHF1 | pleckstrin homology and FYVE domain containing 1 | -2.109 | 1.935 |
| 83636 | C19orf112 | chromosome 19 open reading frame 12 | -0.52 | 2.173 |
| 898 | CCNE1 | cyclin E1 | 2.536 | 3.33 |
| 22847 | ZNF507 | zinc finger protein 507 | 2.168 | 3.957 |
| 147991 | DPY19L3 | dpy-19 like C-mannosyltransferase 3 | 1.687 | 9.131 |
| 390916 | NUDT19 | nudix hydrolase 19 | 0.836 | 2.58 |
| 126248 | WDR88 | WD repeat domain 88 | 2.056 | 5.165 |
| 4037 | LRP3 | LDL receptor related protein 3 | 1.431 | 8.628 |
| 80054 | CEBPA-DT | CEBPA divergent transcript | -1.897 | 2.507 |
| 5184 | PEPD | peptidase D | -2.087 | 8.218 |
| 79047 | KCTD15 | potassium channel tetramerization domain containing 15 | -1.949 | 8.466 |
| 9710 | GARRE1 | granule associated Rac and RHOG effector 1 | -2.933 | 12.568 |
| 2821 | GPI | glucose-6-phosphate isomerase | 1.956 | 7.324 |
| 84306 | PDCD2L | programmed cell death 2 like | -1.564 | 1.865 |
| 126375 | ZNF792 | zinc finger protein 792 | -1.446 | 2.06 |
| 57655 | GRAMD1A | GRAM domain containing 1A | 1.082 | 5.475 |
| 53827 | FXYD5 | FXYD domain containing ion transport regulator 5 | -0.98 | 4.279 |
| 51599 | LSR | lipolysis stimulated lipoprotein receptor | -1.216 | 1.521 |
| 933 | CD22 | CD22 molecule | -4.286 | 11.236 |
| 26330 | GAPDHS | glyceraldehyde-3-phosphate dehydrogenase, spermatogenic | -1.021 | 1.789 |
| 100506469 | TMEM147-AS1 | TMEM147 antisense RNA 1 | -0.83 | 2.664 |
| 10430 | TMEM147 | transmembrane protein 147 | -0.661 | 3.487 |
| 23354 | HAUS5 | HAUS augmin like complex subunit 5 | 0.852 | 1.986 |
| 79713 | IGFLR1 | IGF like family receptor 1 | -0.818 | 2.922 |
| 55957 | LIN37 | lin-37 DREAM MuvB core complex component | 0.718 | 3.388 |
| 115703 | ARHGAP33 | Rho GTPase activating protein 33 | 2.673 | 5.357 |
| 163183 | SYNE4 | spectrin repeat containing nuclear envelope family member 4 | 1.655 | 1.891 |
| 84964 | ALKBH6 | alkB homolog 6 | 0.558 | 1.608 |
| 284403 | WDR62 | WD repeat domain 62 | 2.718 | 4.956 |
| 7705 | ZNF146 | zinc finger protein 146 | -1.006 | 4.16 |
| 107985304 | LOC107985304 | uncharacterized LOC107985304 | -1.065 | 3.265 |
| 342892 | ZNF850 | zinc finger protein 850 | 2.734 | 3.333 |
| 23094 | SIPA1L3 | signal induced proliferation associated 1 like 3 | -0.66 | 4.003 |
| 10653 | SPINT2 | serine peptidase inhibitor, Kunitz type 2 | 1.05 | 2.637 |
| 9424 | KCNK6 | potassium two pore domain channel subfamily K member 6 | -0.728 | 3.159 |
| 147965 | FAM98C | family with sequence similarity 98 member C | 0.59 | 2.494 |
| 115727 | RASGRP4 | RAS guanyl releasing protein 4 | 0.66 | 2.696 |
| 6261 | RYR1 | ryanodine receptor 1 | -3.368 | 9.535 |
| 11184 | MAP4K1 | mitogen-activated protein kinase kinase kinase kinase 1 | -1.66 | 4.5 |
| 105372397 | MAP4K1-AS1 | MAP4K1 antisense RNA 1 | -1.7 | 2.708 |
| 27335 | EIF3K | eukaryotic translation initiation factor 3 subunit K | -0.532 | 1.808 |
| 81 | ACTN4 | actinin alpha 4 | 0.736 | 3.147 |
| 147968 | CAPN12 | calpain 12 | 0.876 | 3.387 |
| 1891 | ECH1 | enoyl-CoA hydratase 1 | -0.463 | 3.477 |
| 126432 | RINL | Ras and Rab interactor like | 0.444 | 1.517 |
| 54938 | SARS2 | seryl-tRNA synthetase 2, mitochondrial | -1.303 | 4.329 |
| 6183 | MRPS12 | mitochondrial ribosomal protein S12 | -0.844 | 3.706 |
| 10298 | PAK4 | p21 (RAC1) activated kinase 4 | -1.071 | 2.837 |
| 9535 | GMFG | glia maturation factor gamma | 1.006 | 7.102 |
| 54623 | PAF1 | PAF1 homolog, Paf1/RNA polymerase II complex component | 0.44 | 1.331 |
| 64857 | PLEKHG2 | pleckstrin homology and RhoGEF domain containing G2 | -1.371 | 1.603 |
| 6217 | RPS16 | ribosomal protein S16 | -0.982 | 2.801 |
| 163126 | EID2 | EP300 interacting inhibitor of differentiation 2 | -0.814 | 1.929 |
| 1178 | CLC | Charcot-Leyden crystal galectin | 3.662 | 5.972 |
| 9149 | DYRK1B | dual specificity tyrosine phosphorylation regulated kinase 1B | -0.942 | 1.55 |
| 2091 | FBL | fibrillarin | -0.763 | 2.498 |
| 8857 | FCGBP | Fc gamma binding protein | -5.627 | 15.784 |
| 5704 | PSMC4 | proteasome 26S subunit, ATPase 4 | -0.368 | 1.614 |
| 284323 | ZNF780A | zinc finger protein 780A | 1.208 | 1.698 |
| 4294 | MAP3K10 | mitogen-activated protein kinase kinase kinase 10 | -1.365 | 4.105 |
| 23646 | PLD3 | phospholipase D family member 3 | -1.465 | 3.288 |
| 57716 | PRX | periaxin | -2.16 | 4.771 |
| 29946 | SERTAD3 | SERTAD3 domain containing 3 | -1.022 | 4.372 |
| 105372489 | SERTAD3-AS1 | SERTAD3 antisense RNA 1 | -0.943 | 2.838 |
| 645 | BLVRB | biliverdin reductase B | -1.396 | 7.159 |
| 8425 | LTBP4 | latent transforming growth factor beta binding protein 4 | -3.801 | 17.155 |
| 284325 | ACTMAP | actin maturation protease | -0.465 | 1.581 |
| 29785 | CYP2S1 | cytochrome P450 family 2 subfamily S member 1 | -3.865 | 7.235 |
| 558 | AXL | AXL receptor tyrosine kinase | -6.754 | 8.71 |
| 80776 | B9D2 | B9 domain containing 2 | 1.005 | 3.487 |
| 641649 | TMEM91 | transmembrane protein 91 | 1.008 | 2.749 |
| 56915 | EXOSC5 | exosome component 5 | -1.483 | 6.025 |
| 374907 | B3GNT8 | UDP-GlcNAc:betaGal beta1,3-N-acetylglucosaminyltransferase 8 | 1.497 | 2.294 |
| 90273 | CEACAM21 | CEA cell adhesion molecule 21 | 2.379 | 4.791 |
| 105372404 | LOC105372404 | uncharacterized LOC105372404 | 4.762 | 12.001 |
| 1089 | CEACAM4 | CEA cell adhesion molecule 4 | 2.418 | 9.665 |
| 1048 | CEACAM5 | CEA cell adhesion molecule 5 | 2.922 | 1.668 |
| 1084 | CEACAM3 | CEA cell adhesion molecule 3 | 2.342 | 3.238 |
| 6223 | RPS19 | ribosomal protein S19 | -0.878 | 8.42 |
| 973 | CD79A | CD79a molecule | -3.429 | 11.268 |
| 478 | ATP1A3 | ATPase Na+/K+ transporting subunit alpha 3 | -2.473 | 1.581 |
| 64763 | ZNF574 | zinc finger protein 574 | 1.248 | 2.912 |
| 5452 | POU2F2 | POU class 2 homeobox 2 | -2.333 | 7.221 |
| 100505622 | POU2F2-AS1 | POU2F2 antisense RNA 1 | -3.201 | 8.358 |
| 5050 | PAFAH1B3 | platelet activating factor acetylhydrolase 1b catalytic subunit 3 | -0.783 | 1.561 |
| 101930071 | LOC101930071 | uncharacterized LOC101930071 | 1.142 | 1.925 |
| 3991 | LIPE | lipase E, hormone sensitive type | 2.441 | 9.267 |
| 634 | CEACAM1 | CEA cell adhesion molecule 1 | 3.236 | 1.897 |
| 105372407 | LOC105372407 | uncharacterized LOC105372407 | 2.535 | 2.113 |
| 1088 | CEACAM8 | CEA cell adhesion molecule 8 | 3.045 | 1.427 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 57126 | CD177 | CD177 molecule | 6.932 | 17.773 |
| 653583 | PHLDB3 | pleckstrin homology like domain family B member 3 | -0.975 | 1.854 |
| 23474 | ETHE1 | ETHE1 persulfide dioxygenase | 1.522 | 9.649 |
| 3783 | KCNN4 | potassium calcium-activated channel subfamily N member 4 | -2.796 | 32.04 |
| 284349 | ZNF283 | zinc finger protein 283 | -1.011 | 2.253 |
| 7773 | ZNF230 | zinc finger protein 230 | 1.465 | 3.212 |
| 10452 | TOMM40 | translocase of outer mitochondrial membrane 40 | -0.651 | 2.496 |
| 1209 | CLPTM1 | CLPTM1 regulator of GABA type A receptor forward trafficking | -0.437 | 1.558 |
| 5971 | RELB | RELB proto-oncogene, NF- κ B subunit | -1.249 | 2.623 |
| 79090 | TRAPP6A | trafficking protein particle complex subunit 6A | 1.021 | 4.632 |
| 2068 | ERCC2 | ERCC excision repair 2, TFIIH core complex helicase subunit | -1.048 | 3.529 |
| 10848 | PPP1R13L | protein phosphatase 1 regulatory subunit 13 like | -1.428 | 2.221 |
| 10849 | POLR1G | RNA polymerase I subunit G | -1.361 | 3.386 |
| 2067 | ERCC1 | ERCC excision repair 1, endonuclease non-catalytic subunit | -1.357 | 6.195 |
| 147699 | PPM1N | protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent 1N (putative) | -1.398 | 1.881 |
| 7408 | VASP | vasodilator stimulated phosphoprotein | 0.696 | 2.249 |
| 2828 | GPR4 | G protein-coupled receptor 4 | 3.468 | 3.287 |
| 24139 | EML2 | EMAP like 2 | 0.725 | 3.447 |
| 23403 | FBXO46 | F-box protein 46 | 0.842 | 3.813 |
| 8189 | SYMPK | symplekin scaffold protein | -0.699 | 3.361 |
| 339344 | MYPOP | Myb related transcription factor, partner of profilin | -0.79 | 2.142 |
| 8993 | PGYRP1 | peptidoglycan recognition protein 1 | 4.05 | 3.012 |
| 105372421 | LOC105372421 | uncharacterized LOC105372421 | 3.001 | 5.337 |
| 5739 | PTGIR | prostaglandin I2 receptor | -0.972 | 7.408 |
| 147906 | DACT3 | dishevelled binding antagonist of beta catenin 3 | -3.278 | 2.913 |
| 25865 | PRKD2 | protein kinase D2 | 0.69 | 1.77 |
| 6510 | SLC1A5 | solute carrier family 1 member 5 | -1.102 | 5.511 |
| 1175 | AP2S1 | adaptor related protein complex 2 subunit sigma 1 | -0.414 | 1.536 |
| 2909 | ARHGAP35 | Rho GTPase activating protein 35 | -0.505 | 1.727 |
| 27113 | BBC3 | BCL2 binding component 3 | -0.899 | 2.552 |
| 27202 | C5AR2 | complement C5a receptor 2 | 0.68 | 2.698 |
| 29997 | NOP53 | NOP53 ribosome biogenesis factor | -1.122 | 3.566 |
| 56344 | CABP5 | calcium binding protein 5 | -2.005 | 1.735 |
| 8605 | PLA2G4C | phospholipase A2 group IVC | -2.644 | 2.284 |
| 3978 | LIG1 | DNA ligase 1 | 1.621 | 2.666 |
| 93233 | ODAD1 | outer dynein arm docking complex subunit 1 | 1.103 | 1.41 |
| 2014 | EMP3 | epithelial membrane protein 3 | -0.927 | 4.635 |
| 10945 | KDELR1 | KDEL endoplasmic reticulum protein retention receptor 1 | -0.421 | 1.432 |
| 107984140 | LOC107984140 | glutamate ionotropic receptor NMDA type subunit 2D | -1.258 | 1.679 |
| 2906 | GRIN2D | glutamate rich WD repeat containing 1 | -2.532 | 4.051 |
| 83743 | GRWD1 | ribosomal protein L18 | -0.866 | 1.728 |
| 6141 | RPL18 | sphingosine kinase 2 | -0.714 | 2.028 |
| 56848 | SPHK2 | branched chain amino acid transaminase 2 | -0.503 | 1.437 |
| 587 | BCAT2 | ferritin light chain | -0.998 | 2.121 |
| 2512 | FTL | glycogen synthase 1 | -0.714 | 2.544 |
| 2997 | GYS1 | transient receptor potential cation channel subfamily M member 4 | 2.278 | 9.075 |
| 54795 | TRPM4 | solute carrier family 6 member 16 | -4.027 | 12.137 |
| 28968 | SLC6A16 | CD37 molecule | 1.357 | 2.89 |
| 951 | CD37 | aldehyde dehydrogenase 16 family member A1 | -0.554 | 2.618 |
| 126133 | ALDH16A1 | fms related receptor tyrosine kinase 3 ligand | -0.811 | 4.909 |
| 2323 | FLT3LG | ribosomal protein L13a | -1.621 | 10.812 |
| 23521 | RPL13A | ribosomal protein S11 | -0.731 | 1.99 |
| 6205 | RPS11 | nitric oxide synthase interacting protein | -0.649 | 2.642 |
| 51070 | NOSIP | RAS related | -0.485 | 1.574 |
| 6237 | RRAS | BCL2 like 12 | -2.313 | 10.017 |
| 83596 | BCL2L12 | protein arginine methyltransferase 1 | 0.557 | 1.641 |
| 3276 | PRMT1 | testis specific serine kinase substrate | -0.782 | 2.456 |
| 60385 | TSKS | adaptor related protein complex 2 subunit alpha 1 | -2.204 | 1.462 |
| 160 | AP2A1 | PTOV1 antisense RNA 1 | -0.615 | 4.27 |
| 100506033 | PTOV1-AS1 | polynucleotide kinase 3'-phosphatase | 0.652 | 1.847 |
| 11284 | PNKP | TBC1 domain family member 17 | 0.478 | 1.808 |
| 79735 | TBC1D17 | interleukin 4 induced 1 | -0.826 | 4.15 |
| 259307 | IL4I1 | nucleoporin 62 | -2.757 | 11.618 |
| 23636 | NUP62 | activating transcription factor 5 | -1.484 | 15.519 |
| 22809 | ATF5 | microRNA 4751 | -2.423 | 23.036 |
| 100616483 | MIR4751 | sialic acid binding Ig like lectin 16 | -2.814 | 7.794 |
| 400709 | SIGLEC16 | potassium voltage-gated channel subfamily C member 3 | -1.333 | 1.727 |
| 3748 | KCNC3 | napsin B aspartic peptidase, pseudogene | -3.059 | 11.467 |
| 256236 | NAPSB | napsin A aspartic peptidase | -3.286 | 5.123 |
| 9476 | NAPSA | DNA polymerase delta 1, catalytic subunit | -1.486 | 2.308 |
| 5424 | POLD1 | Spi-B transcription factor | 0.778 | 1.565 |
| 6689 | SPIB | aspartate dehydrogenase domain containing | -4.749 | 6.424 |
| 554235 | ASPDH | C-type lectin domain containing 11A | -2.058 | 2.236 |
| 6320 | CLEC11A | multidrug resistance-related protein | 1.406 | 1.951 |
| 84798 | C19orf48 | sialic acid binding Ig like lectin 9 | 0.826 | 1.39 |
| 27180 | SIGLEC9 | sialic acid binding Ig like lectin 7 | -1.173 | 2.739 |
| 27036 | SIGLEC7 | uncharacterized LOC101928517 | -2.415 | 8.819 |
| 101928517 | LOC101928517 | sialic acid binding Ig like lectin 17, pseudogene | -2.295 | 7.715 |
| 284367 | SIGLEC17P | CD33 molecule | -2.129 | 2.418 |
| 945 | CD33 | V-set and immunoglobulin domain containing 10 like | -0.705 | 2.217 |
| 147645 | VSIG10L | claudin domain containing 2 | -1.334 | 2.383 |
| 125875 | CLDND2 | natural killer cell granule protein 7 | 2.455 | 7.014 |
| 4818 | NKG7 | lens intrinsic membrane protein 2 | 2.901 | 3.342 |
| 3982 | LIM2 | LIM2 and SIGLEC10 antisense RNA 1 | 2.654 | 2.126 |
| 105372446 | LIM2-AS1 | chromosome 19 open reading frame 84 | 1.494 | 1.855 |
| 147646 | C19orf84 | sialic acid binding Ig like lectin 10 | 2.859 | 3.742 |
| 89790 | SIGLEC10 | SIGLEC10 antisense RNA 1 | -1.526 | 3.158 |
| 100129083 | SIGLEC10-AS1 | sialic acid binding Ig like lectin 5 | -1.461 | 3.898 |
| 8778 | SIGLEC5 | sperm acrosome associated 6 | 1.438 | 2.799 |
| 147650 | SPACA6 | formyl peptide receptor 3 | 2.438 | 10.188 |
| 2359 | FPR3 | zinc finger protein 577 | -2.901 | 3.456 |
| 84765 | ZNF577 | zinc finger protein 350 | -0.617 | 1.32 |
| 59348 | ZNF350 | protein phosphatase 2 scaffold subunit Aalpha | 0.582 | 1.954 |
| 5518 | PPP2R1A | zinc finger protein 702, pseudogene | -0.324 | 1.536 |
| 79986 | ZNF702P | zinc finger protein 160 | -5.19 | 5.915 |
| 90338 | ZNF160 | zinc finger protein 818, pseudogene | -0.56 | 1.479 |
| 390963 | ZNF818P | zinc finger protein 765 | 1.552 | 3.432 |
| 91661 | ZNF765 | zinc finger protein 331 | 1.011 | 1.487 |
| 55422 | ZNF331 | V-set and transmembrane domain containing 1 | -0.839 | 1.955 |
| 284415 | VSTM1 | T cell-interacting, activating receptor on myeloid cells 1 | 1.341 | 6.376 |
| 441864 | TARM1 | | 2.937 | 2.531 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|---------------|---|----------|----------|
| 126014 | OSCAR | osteoclast associated Ig-like receptor | 0.482 | 2.236 |
| 79165 | LENG1 | leukocyte receptor cluster member 1 | -0.789 | 2.428 |
| 6203 | RPS9 | ribosomal protein S9 | -0.558 | 1.796 |
| 10288 | LILRB2 | leukocyte immunoglobulin like receptor B2 | -1.133 | 6.135 |
| 11024 | LILRA1 | leukocyte immunoglobulin like receptor A1 | -1.903 | 14.304 |
| 10859 | LILRB1 | leukocyte immunoglobulin like receptor B1 | -2.084 | 14.354 |
| 11006 | LILRB4 | leukocyte immunoglobulin like receptor B4 | -2.639 | 6.644 |
| 102724290 | LOC102724290 | uncharacterized LOC102724290 | -3.262 | 2.177 |
| 2204 | FCAR | Fc alpha receptor | 2.536 | 10.589 |
| 9437 | NCR1 | natural cytotoxicity triggering receptor 1 | 2.149 | 1.75 |
| 107985325 | GP6-AS1 | GP6 antisense RNA 1 | -3.088 | 3.369 |
| 112724 | RDH13 | retinol dehydrogenase 13 | -2.193 | 2.789 |
| 54869 | EPS8L1 | EPS8 like 1 | -2.525 | 3.868 |
| 7138 | TNNT1 | troponin T1, slow skeletal type | -5.583 | 3.673 |
| 255043 | TMEM86B | transmembrane protein 86B | 0.812 | 2.41 |
| 23640 | HSPBP1 | HSPA (Hsp70) binding protein 1 | -0.854 | 2.722 |
| 84446 | BRSK1 | BR serine/threonine kinase 1 | -1.832 | 1.465 |
| 284417 | TMEM150B | transmembrane protein 150B | -2.37 | 5.889 |
| 6158 | RPL28 | ribosomal protein L28 | -0.764 | 2.652 |
| 27338 | UBE2S | ubiquitin conjugating enzyme E2 S | 1.528 | 5.286 |
| 109623451 | SNORD157 | small nucleolar RNA, C/D box 157 | 2.417 | 3.474 |
| 79763 | ISOC2 | isochorismatase domain containing 2 | -1.557 | 5.078 |
| 89887 | ZNF628 | zinc finger protein 628 | -0.7 | 1.638 |
| 163033 | ZNF579 | zinc finger protein 579 | -0.838 | 1.368 |
| 100507290 | ZNF865 | zinc finger protein 865 | 0.895 | 6.654 |
| 147808 | ZNF784 | zinc finger protein 784 | 0.733 | 2.963 |
| 107983998 | LOC107983998 | uncharacterized LOC107983998 | 0.444 | 1.47 |
| 51545 | ZNF581 | zinc finger protein 581 | -0.62 | 1.315 |
| 29924 | EPN1 | epsin 1 | -0.548 | 1.633 |
| 126208 | ZNF787 | zinc finger protein 787 | 0.884 | 4.6 |
| 79149 | ZSCAN5A | zinc finger and SCAN domain containing 5A | -1.536 | 2.543 |
| 10794 | ZNF460 | zinc finger protein 460 | -0.649 | 2.131 |
| 284309 | ZNF776 | zinc finger protein 776 | 1.605 | 5.516 |
| 54807 | ZNF586 | zinc finger protein 586 | 1.078 | 1.819 |
| 79818 | ZNF552 | zinc finger protein 552 | 1.604 | 8.131 |
| 84914 | ZNF587 | zinc finger protein 587 | 0.66 | 2.191 |
| 147687 | ZNF417 | zinc finger protein 417 | 0.637 | 1.828 |
| 147686 | ZNF418 | zinc finger protein 418 | 1.296 | 1.315 |
| 79673 | ZNF329 | zinc finger protein 329 | 1.311 | 1.944 |
| 10782 | ZNF274 | zinc finger protein 274 | 0.523 | 1.485 |
| 27300 | ZNF544 | zinc finger protein 544 | 1.064 | 1.623 |
| 1 | A1BG | alpha-1-B glycoprotein | -1.6 | 1.856 |
| 503538 | A1BG-AS1 | A1BG antisense RNA 1 | -2.358 | 3.702 |
| 162968 | ZNF497 | zinc finger protein 497 | -1.975 | 3.806 |
| 6193 | RPS5 | ribosomal protein S5 | -0.812 | 1.975 |
| 113218487 | MIR10394 | microRNA 10394 | -0.789 | 1.791 |
| 27243 | CHMP2A | charged multivesicular body protein 2A | 0.638 | 3.126 |
| 9040 | UBE2M | ubiquitin conjugating enzyme E2 M | 0.483 | 2.08 |
| 100507459 | NRSN2-AS1 | NRSN2 antisense RNA 1 | -4.617 | 2.961 |
| 57761 | TRIB3 | tribbles pseudokinase 3 | 1.595 | 6.015 |
| 128637 | TBC1D20 | TBC1 domain family member 20 | 0.356 | 1.915 |
| 83541 | FAM110A | family with sequence similarity 110 member A | -1.935 | 15.589 |
| 9491 | PSMF1 | proteasome inhibitor subunit 1 | -0.386 | 2.286 |
| 9751 | SNPH | syntaphilin | -3.114 | 3.381 |
| 100528031 | FKBP1A-SDCBP2 | FKBP1A-SDCBP2 readthrough (NMD candidate) | 0.316 | 1.347 |
| 100507495 | SDCBP2-AS1 | SDCBP2 antisense RNA 1 | 1.067 | 5.322 |
| 2280 | FKBP1A | FKBP prolyl isomerase 1A | 0.396 | 1.979 |
| 284759 | SIRPB2 | signal regulatory protein beta 2 | -1.313 | 4.592 |
| 105369219 | SIRPB3P | signal regulatory protein beta 3, pseudogene | 1.345 | 1.326 |
| 100289473 | LOC100289473 | cytoskeleton associated protein 2-like pseudogene | 1.117 | 2.195 |
| 105372501 | LOC105372501 | uncharacterized LOC105372501 | 1.273 | 1.367 |
| 107984088 | LOC107984088 | uncharacterized LOC107984088 | 1.502 | 2.895 |
| 102724545 | LOC102724545 | uncharacterized LOC102724545 | 1.491 | 4.272 |
| 140901 | STK35 | serine/threonine kinase 35 | 0.884 | 3.894 |
| 7053 | TGM3 | transglutaminase 3 | 2.49 | 2.297 |
| 56265 | CPXM1 | carboxypeptidase X, M14 family member 1 | 2.95 | 1.782 |
| 64773 | PCED1A | PC-esterase domain containing 1A | -0.931 | 4.217 |
| 64949 | MRPS26 | mitochondrial ribosomal protein S26 | -0.576 | 1.394 |
| 9762 | LZTS3 | leucine zipper tumor suppressor family member 3 | -1.537 | 1.482 |
| 3704 | ITPA | inosine triphosphatase | -0.784 | 2.775 |
| 25943 | DNAAF9 | dynein axonemal assembly factor 9 | -0.964 | 3.954 |
| 8455 | ATRN | attractin | -0.933 | 2.253 |
| 6614 | SIGLEC1 | sialic acid binding Ig like lectin 1 | -5.395 | 2.746 |
| 116835 | HSPA12B | heat shock protein family A (Hsp70) member 12B | 1.186 | 1.657 |
| 54976 | C20orf27 | chromosome 20 open reading frame 27 | 1.155 | 3.639 |
| 1059 | CENPB | centromere protein B | -0.728 | 2.686 |
| 55317 | AP5S1 | adaptor related protein complex 5 subunit sigma 1 | 0.562 | 1.658 |
| 57506 | MAVS | mitochondrial antiviral signaling protein | 0.871 | 3.18 |
| 80025 | PANK2 | pantothenate kinase 2 | 1.261 | 12.621 |
| 11237 | RNF24 | ring finger protein 24 | 1.965 | 14.574 |
| 5621 | PRNP | prion protein | -1.543 | 2.947 |
| 105372511 | LOC105372511 | uncharacterized LOC105372511 | 1.025 | 1.973 |
| 107985392 | LOC107985392 | uncharacterized LOC107985392 | 1.243 | 3.485 |
| 9962 | SLC23A2 | solute carrier family 23 member 2 | -1.259 | 6.857 |
| 5111 | PCNA | proliferating cell nuclear antigen | 2.522 | 3.073 |
| 100302739 | PCNA-AS1 | PCNA antisense RNA 1 | 2.399 | 3.073 |
| 149837 | LINC00654 | long intergenic non-protein coding RNA 654 | -1.361 | 1.738 |
| 51605 | TRMT6 | tRNA methyltransferase 6 non-catalytic subunit | 1.36 | 4.386 |
| 84515 | MCM8 | minichromosome maintenance 8 homologous recombination repair factor | 2.013 | 2.871 |
| 54675 | CRSL1 | cardiolipin synthase 1 | 1.426 | 5.423 |
| 650 | BMP2 | bone morphogenetic protein 2 | 3.729 | 4.06 |
| 56255 | TMX4 | thioredoxin related transmembrane protein 4 | 0.768 | 3.441 |
| 105372520 | TMX4-AS1 | TMX4 antisense RNA 1 | 1.651 | 1.616 |
| 23236 | PLCB1 | phospholipase C beta 1 | -2.138 | 2.639 |
| 24141 | LAMP5 | lysosomal associated membrane protein family member 5 | -3.407 | 2.905 |
| 128710 | SLX4IP | SLX4 interacting protein | 0.674 | 2.5 |
| 182 | JAG1 | jagged canonical Notch ligand 1 | 1.938 | 8.577 |
| 55617 | TASP1 | taspinase 1 | -1.189 | 3.571 |
| 79133 | NDUFAF5 | NADH:ubiquinone oxidoreductase complex assembly factor 5 | 0.719 | 1.584 |
| 27131 | SNX5 | sorting nexin 5 | -0.79 | 4.655 |
| 92667 | MGME1 | mitochondrial genome maintenance exonuclease 1 | 1.073 | 3.989 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 100303755 | PET117 | PET117 cytochrome c oxidase chaperone | -1.011 | 2.561 |
| 57325 | KAT14 | lysine acetyltransferase 14 | -0.845 | 1.908 |
| 10621 | POLR3F | RNA polymerase III subunit F | 0.593 | 1.353 |
| 10741 | RBBP9 | RB binding protein 9, serine hydrolase | 1.123 | 3.134 |
| 57419 | SLC24A3 | solute carrier family 24 member 3 | 1.642 | 1.707 |
| 54453 | RIN2 | Ras and Rab interactor 2 | -2.802 | 8.866 |
| 51340 | CRNLK1 | crooked neck pre-mRNA splicing factor 1 | 0.767 | 2.314 |
| 57186 | RALGAPA2 | Ral GTPase activating protein catalytic subunit alpha 2 | 1.632 | 9.829 |
| 105372555 | LOC105372555 | uncharacterized LOC105372555 | 3.175 | 2.933 |
| 22803 | XRN2 | 5'-3' exoribonuclease 2 | -0.47 | 1.421 |
| 101929707 | LOC101929707 | uncharacterized LOC101929707 | 3.415 | 3.162 |
| 22918 | CD93 | CD93 molecule | -0.981 | 1.818 |
| 63908 | NAPB | NSF attachment protein beta | 0.835 | 3.278 |
| 1471 | CST3 | cystatin C | -2.529 | 10.759 |
| 105372578 | LINC02967 | long intergenic non-protein coding RNA 2967 | 5.24 | 9.676 |
| 8530 | CST7 | cystatin F | 3.414 | 4.68 |
| 57136 | APMAP | adipocyte plasma membrane associated protein | 3.061 | 9.933 |
| 955 | ENTPD6 | ectonucleoside triphosphate diphosphohydrolase 6 | -1.915 | 10.421 |
| 5834 | PYGB | glycogen phosphorylase B | -1.188 | 7.172 |
| 9837 | GINS1 | GINS complex subunit 1 | 2.446 | 2.12 |
| 100134868 | LOC100134868 | uncharacterized LOC100134868 | -1.423 | 1.341 |
| 100289097 | FRG1CP | FSHD region gene 1 family member C, pseudogene | -1.439 | 2.011 |
| 102723390 | FRG1EP | FSHD region gene 1 family member E, pseudogene | -1.823 | 1.852 |
| 3397 | ID1 | inhibitor of DNA binding 1 | -1.479 | 1.66 |
| 598 | BCL2L1 | BCL2 like 1 | 0.388 | 1.604 |
| 22974 | TPX2 | TPX2 microtubule nucleation factor | 2.898 | 1.504 |
| 343702 | XKR7 | XK related 7 | -2.866 | 7.156 |
| 9777 | TM9SF4 | transmembrane 9 superfamily member 4 | -1.366 | 9.65 |
| 107985403 | LOC107985403 | kinesin family member 3B | -1.101 | 4.153 |
| 9371 | KIF3B | CDK5 regulatory subunit associated protein 1 | -0.592 | 1.598 |
| 51654 | CDK5RAP1 | N-terminal EF-hand calcium binding protein 3 | -0.471 | 1.691 |
| 63941 | NECAB3 | E2F transcription factor 1 | -0.759 | 2.916 |
| 1869 | E2F1 | RALY heterogeneous nuclear ribonucleoprotein | 2.32 | 3.267 |
| 22913 | RALY | adenosylhomocysteinase | 0.417 | 2.814 |
| 191 | AHCY | dynein light chain roadblock-type 1 | 0.916 | 3.133 |
| 83658 | DYNLRB1 | microtubule associated protein 1 light chain 3 alpha | 0.606 | 3.097 |
| 84557 | MAP1LC3A | phosphatidylinositol glycan anchor biosynthesis class U | 2.406 | 4.25 |
| 128869 | PIGU | tumor protein p53 inducible nuclear protein 2 | 0.703 | 1.655 |
| 58476 | TP53INP2 | gamma-glutamyltransferase 7 | 1.539 | 2.794 |
| 2686 | GGT7 | matrix metallopeptidase 24 | -3.283 | 10.961 |
| 10893 | MMP24 | eukaryotic translation initiation factor 6 | 0.536 | 2.301 |
| 3692 | EIF6 | ubiquinol-cytochrome c reductase complex assembly factor 1 | -0.453 | 1.615 |
| 55245 | UQCC1 | centrosomal protein 250 | -0.878 | 2.957 |
| 11190 | CEP250 | CEP250 antisense RNA 1 | 0.833 | 5.053 |
| 102725201 | CEP250-AS1 | sperm associated antigen 4 | 1.178 | 2.367 |
| 6676 | SPAG4 | copine 1 | 2.122 | 5.501 |
| 8904 | CPNE1 | RNA binding motif protein 12 | 0.921 | 2.334 |
| 10137 | RBM12 | reactive oxygen species modulator 1 | 0.642 | 3.352 |
| 140823 | ROMO1 | RNA binding motif protein 39 | 1.106 | 5.62 |
| 9584 | RBM39 | PHD finger protein 20 | 0.671 | 1.319 |
| 51230 | PHF20 | non-coding RNA activated by DNA damage | -0.47 | 1.805 |
| 647979 | NORAD | DLG associated protein 4 | 0.391 | 2.015 |
| 22839 | DLGAP4 | TGFB induced factor homeobox 2 | -0.722 | 1.992 |
| 60436 | TGIF2 | TGIF2-RAB5IF readthrough | -2.185 | 8.042 |
| 100527943 | TGIF2-RAB5IF | RAB5 interacting factor | 0.833 | 6.25 |
| 55969 | RAB5IF | DSN1 component of MIS12 kinetochore complex | 0.911 | 7.273 |
| 79980 | DSN1 | suppressor of glucose, autophagy associated 1 | 1.494 | 2.731 |
| 140710 | SOGA1 | TBC/LysM-associated domain containing 2 | -2.705 | 17.25 |
| 140711 | TLDC2 | SAM and HD domain containing deoxynucleoside triphosphate triphosphohydrolase 1 | -2.415 | 37.673 |
| 25939 | SAMHD1 | RB transcriptional corepressor like 1 | -2.485 | 35.369 |
| 5933 | RBL1 | mannosidase beta like | 1.709 | 2.639 |
| 63905 | MANBAL | SRC proto-oncogene, non-receptor tyrosine kinase | -1.164 | 5.651 |
| 6714 | SRC | catenin beta like 1 | -3.592 | 22.82 |
| 56259 | CTNNBL1 | transglutaminase 2 | -0.731 | 3.259 |
| 7052 | TGM2 | bactericidal permeability increasing protein | -4.518 | 17.418 |
| 671 | BPI | protein phosphatase 1 regulatory subunit 16B | 3.75 | 2.642 |
| 26051 | PPP1R16B | family with sequence similarity 83 member D | -1.972 | 1.516 |
| 81610 | FAM83D | MAF bZIP transcription factor B | 3.031 | 3.919 |
| 9935 | MAFB | phospholipase C gamma 1 | -1.274 | 1.548 |
| 5335 | PLCG1 | zinc fingers and homeoboxes 3 | -2.913 | 3.539 |
| 23051 | ZHX3 | chromodomain helicase DNA binding protein 6 | -2.263 | 6.889 |
| 84181 | CHD6 | MYB proto-oncogene like 2 | -1.328 | 13.912 |
| 4605 | MYBL2 | TOX high mobility group box family member 2 | 3.417 | 2.04 |
| 84969 | TOX2 | alpha tocopherol transfer protein like | 1.127 | 1.605 |
| 79183 | TPTPAL | serine incorporator 3 | 2.106 | 12.093 |
| 10955 | SERINC3 | adenosine deaminase | 0.486 | 2.072 |
| 100 | ADA | poly(A) binding protein cytoplasmic 1 like | -2.357 | 7.128 |
| 80336 | PABPC1L | dysbindin domain containing 2 | 1.178 | 9.312 |
| 55861 | DBNDD2 | ubiquitin conjugating enzyme E2 C | -1.299 | 1.675 |
| 11065 | UBE2C | sorting nexin family member 21 | 3.682 | 5.293 |
| 90203 | SNX21 | zinc finger protein 335 | -0.501 | 1.408 |
| 63925 | ZNF335 | matrix metallopeptidase 9 | 0.508 | 2.583 |
| 4318 | MMP9 | SLC12A5 and MMP9 antisense RNA 1 | 5.253 | 14.073 |
| 109729184 | SLC12A5-AS1 | CD40 molecule | 5.345 | 14.913 |
| 958 | CD40 | solute carrier family 35 member C2 | -3.661 | 25.194 |
| 51006 | SLC35C2 | engulfment and cell motility 2 | 1.375 | 6.534 |
| 63916 | ELMO2 | nuclear receptor coactivator 3 | 0.761 | 1.635 |
| 8202 | NCOA3 | sulfatase 2 | -0.866 | 4.733 |
| 55959 | SULF2 | ADP ribosylation factor guanine nucleotide exchange factor 2 | -2.009 | 4.099 |
| 10564 | ARFGEF2 | small nucleolar RNA, C/D box 12 | -0.527 | 2.753 |
| 692057 | SNORD12 | beta-1,4-galactosyltransferase 5 | 1.194 | 2.011 |
| 9334 | B4GALT5 | uncharacterized LOC105372652 | 1.855 | 3.412 |
| 105372652 | LOC105372652 | solute carrier family 9 member A8 | 3.174 | 1.651 |
| 23315 | SLC9A8 | microRNA 12122 | 1.603 | 6.822 |
| 113219455 | MIR12122 | spormatogenesis associated 2 | 1.739 | 2.806 |
| 9825 | SPATA2 | ring finger protein 114 | 0.652 | 1.558 |
| 55905 | RNF114 | PEDS1-UBE2V1 readthrough | -0.622 | 3.395 |
| 387522 | PEDS1-UBE2V1 | plasmylethanolamine desaturase 1 | -0.363 | 1.413 |
| 387521 | PEDS1 | plaque enriched lncRNA in atherosclerotic and inflammatory bowel macrophage regulation | -0.672 | 2.462 |
| 100506115 | PELATON | protein tyrosine phosphatase non-receptor type 1 | -1.437 | 2.897 |
| 5770 | PTPN1 | protein tyrosine phosphatase non-receptor type 1 | 0.543 | 2.231 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|----------------|---|----------|----------|
| 84612 | PARD6B | par-6 family cell polarity regulator beta | 2.98 | 6.526 |
| 27304 | MOC3 | molybdenum cofactor synthesis 3 | -1.337 | 2.422 |
| 10079 | ATP9A | ATPase phospholipid transporting 9A (putative) | 4.072 | 11.775 |
| 55734 | ZFP64 | ZFP64 zinc finger protein | -0.776 | 1.321 |
| 391257 | SUMO1P1 | SUMO1 pseudogene 1 | 1.16 | 1.626 |
| 6790 | AURKA | aurora kinase A | 2.072 | 2.968 |
| 51507 | RTF2 | replication termination factor 2 | 0.843 | 6.25 |
| 140687 | GCNT7 | glucosaminyl (N-acetyl) transferase family member 7 | 1.607 | 6.093 |
| 105372681 | LOC105372681 | | 1.578 | 2.528 |
| 200232 | FAM209A | family with sequence similarity 209 member A | 1.431 | 4.515 |
| 388799 | FAM209B | family with sequence similarity 209 member B | 0.908 | 1.605 |
| 8480 | RAE1 | ribonucleic acid export 1 | 1.324 | 5.507 |
| 100291105 | RBM38-AS1 | RBM38 antisense RNA 1 | 1.54 | 11.982 |
| 55544 | RBM38 | RNA binding motif protein 38 | 1.597 | 14.48 |
| 105372688 | LOC105372688 | uncharacterized LOC105372688 | 2.916 | 2.23 |
| 81030 | ZBP1 | Z-DNA binding protein 1 | -1.72 | 1.406 |
| 1522 | CTSZ | cathepsin Z | -1.154 | 6.168 |
| 81027 | TUBB1 | tubulin beta 1 class VI | -1.694 | 1.936 |
| 10388 | SYCP2 | synaptonemal complex protein 2 | 1.523 | 3.559 |
| 63939 | FAM217B | family with sequence similarity 217 member B | 1.523 | 12.39 |
| 5509 | PPP1R3D | protein phosphatase 1 regulatory subunit 3D | 1.592 | 6.673 |
| 284757 | MIR646HG | MIR646 host gene | 1.467 | 2.685 |
| 105372698 | LOC105372698 | uncharacterized LOC105372698 | 0.927 | 1.331 |
| 105372697 | LOC105372697 | uncharacterized LOC105372697 | 1.75 | 1.534 |
| 5688 | PSMA7 | proteasome 20S subunit alpha 7 | 0.676 | 2.173 |
| 26164 | MTG2 | mitochondrial ribosome associated GTPase 2 | 0.638 | 3.778 |
| 9885 | OSBPL2 | oxysterol binding protein like 2 | 1.141 | 4.729 |
| 6227 | RPS21 | ribosomal protein S21 | -0.596 | 1.995 |
| 105372712 | LINC02970 | long intergenic non-protein coding RNA 2970 | 3.183 | 4.076 |
| 28231 | SLCO4A1 | solute carrier organic anion transporter family member 4A1 | 3.342 | 8.24 |
| 11054 | OGFR | opioid growth factor receptor | -1.025 | 3.273 |
| 1299 | COL9A3 | collagen type IX alpha 3 chain | 3.057 | 3.81 |
| 10732 | TCFL5 | transcription factor like 5 | 0.74 | 2.17 |
| 11083 | DIDO1 | death inducer-obliterator 1 | 0.648 | 3.47 |
| 54994 | GID8 | GID complex subunit 8 homolog | 0.459 | 1.895 |
| 5753 | PTK6 | protein tyrosine kinase 6 | -1.105 | 1.329 |
| 26205 | GMEB2 | glucocorticoid modulatory element binding protein 2 | 0.58 | 1.303 |
| 100505771 | MHENCR | melanoma highly expressed competing endogenous lncRNA for miR-425 and miR-489 | 1.405 | 5.57 |
| 56731 | SLC2A4RG | SLC2A4 regulator | 0.83 | 1.413 |
| 140685 | ZBTB46 | zinc finger and BTB domain containing 46 | -1.779 | 4.527 |
| 112268269 | LOC112268269 | uncharacterized LOC112268269 | -0.87 | 1.42 |
| 80331 | DNAJC5 | DnaJ heat shock protein family (Hsp40) member C5 | 0.835 | 5.123 |
| 24148 | PRPF6 | pre-mRNA processing factor 6 | -0.679 | 2.586 |
| 10287 | RGS19 | regulator of G protein signaling 19 | 0.691 | 4.861 |
| 102723996 | LOC102723996 | ICOS ligand | -3.155 | 4.704 |
| 105372831 | CH507-9B2.8 | uncharacterized CH507-9B2.8 | -2.231 | 2.604 |
| 107987292 | LOC107987292 | putative proline-rich protein 21 | -3.113 | 10.788 |
| 101928576 | LOC101928576 | uncharacterized LOC101928576 | -2.531 | 4.674 |
| 102724023 | LOC102724023 | glutamine amidotransferase class 1 domain containing 3B | -0.601 | 3.478 |
| 102724428 | LOC102724428 | salt inducible kinase 1B (putative) | -3.177 | 7.228 |
| 102724483 | LOC102724843 | uncharacterized LOC102724843 | 1.675 | 1.753 |
| 105379493 | CH507-145C22.1 | uncharacterized CH507-145C22.1 | 2.421 | 1.368 |
| 102724560 | LOC102724560 | cystathione beta-synthase like | 3.278 | 2.496 |
| 109864280 | RNA18SN2 | RNA, 18S ribosomal N2 | -0.626 | 2.201 |
| 109910380 | RNA18SN3 | RNA, 18S ribosomal N3 | -0.669 | 2.284 |
| 106631777 | RNA45SN1 | RNA, 45S pre-ribosomal N1 | -0.572 | 2.194 |
| 106631781 | RNA18SN1 | RNA, 18S ribosomal N1 | -0.644 | 2.286 |
| 54033 | RBM11 | RNA binding motif protein 11 | 3.261 | 7.709 |
| 64092 | SAMSN1 | SAM domain, SH3 domain and nuclear localization signals 1 | 1.473 | 2.227 |
| 100874190 | SAMSN1-AS1 | SAMSN1 antisense RNA 1 | 5.069 | 2.882 |
| 29761 | USP25 | ubiquitin specific peptidase 25 | -0.71 | 2.68 |
| 351 | APP | amyloid beta precursor protein | 1.028 | 3.45 |
| 100996571 | CYYR1-AS1 | CYYR1 antisense RNA 1 | 2.914 | 2.082 |
| 116159 | CYYR1 | cysteine and tyrosine rich 1 | 3.722 | 3.909 |
| 9510 | ADAMTS1 | ADAM metallopeptidase with thrombospondin type 1 motif 1 | 4.472 | 2.534 |
| 10069 | RWDD2B | RWD domain containing 2B | -0.983 | 1.547 |
| 56911 | MAP3K7CL | MAP3K7 C-terminal like | -1.867 | 2.721 |
| 193629 | LINC00189 | long intergenic non-protein coding RNA 189 | -2.169 | 2.614 |
| 571 | BACH1 | BTB domain and CNC homolog 1 | -0.671 | 2.252 |
| 2897 | GRIK1 | glutamate ionotropic receptor kainate type subunit 1 | -1.343 | 1.952 |
| 105372768 | LOC105372768 | uncharacterized LOC105372768 | -1.724 | 1.759 |
| 100379661 | GRIK1-AS2 | GRIK1 antisense RNA 2 | -2.334 | 2.713 |
| 7074 | TIAM1 | TIAM Rac1 associated GEF 1 | -3.587 | 6.364 |
| 107985487 | LOC107985487 | | -3.767 | 3.471 |
| 6647 | SOD1 | superoxide dismutase 1 | -0.914 | 2.829 |
| 54069 | MIS18A | MIS18 kinetochore protein A | 1.259 | 1.391 |
| 9875 | URB1 | URB1 ribosome biogenesis homolog | -0.949 | 2.398 |
| 84996 | URB1-AS1 | URB1 antisense RNA 1 (head to head) | -1.064 | 1.494 |
| 59271 | EVA1C | eva-1 homolog C | -1.415 | 2.007 |
| 100506215 | PAXBP1-AS1 | PAXBP1 antisense RNA 1 | 0.73 | 1.663 |
| 94104 | PAXBP1 | PAX3 and PAX7 binding protein 1 | 1.327 | 3.929 |
| 116448 | OLIG1 | oligodendrocyte transcription factor 1 | -1.046 | 1.417 |
| 3455 | IFNAR2 | interferon alpha and beta receptor subunit 2 | -0.701 | 2.567 |
| 29980 | DONSON | DNA replication fork stabilization factor DONSON | 1.54 | 3.447 |
| 6453 | ITSN1 | intersectin 1 | -1.717 | 8.668 |
| 100506334 | LINC00649 | long intergenic non-protein coding RNA 649 | -2.993 | 2.248 |
| 64968 | MRPS6 | mitochondrial ribosomal protein S6 | -0.739 | 1.685 |
| 3753 | KCNE1 | potassium voltage-gated channel subfamily E regulatory subunit 1 | 1.691 | 9.65 |
| 1827 | RCAN1 | regulator of calcineurin 1 | 0.594 | 3.181 |
| 80215 | RUNX1-IT1 | RUNX1 intronic transcript 1 | 1.135 | 1.857 |
| 100133286 | CBR1-AS1 | CBR1 antisense RNA 1 | -1.996 | 7.335 |
| 873 | CBR1 | carboxyl reductase 1 | -2.034 | 9.708 |
| 9980 | DOP1B | DOP1 leucine zipper like protein B | 1.301 | 3.928 |
| 8208 | CHAF1B | chromatin assembly factor 1 subunit B | 2.399 | 3.11 |
| 3141 | HLCS | holocarboxylase synthetase | -1.593 | 1.652 |
| 3772 | KCNJ15 | potassium inwardly rectifying channel subfamily J member 15 | 2.965 | 3.923 |
| 105372801 | LOC105372801 | uncharacterized LOC105372801 | 3.366 | 4.933 |
| 2078 | ERG | ETS transcription factor ERG | 3.016 | 1.728 |
| 3150 | HMGN1 | high mobility group nucleosome binding domain 1 | 1.668 | 7.776 |
| 7485 | GET1 | guided entry of tail-anchored proteins factor 1 | 1.549 | 4.033 |
| 106865373 | GET1-SH3BGR | GET1-SH3BGR readthrough | 1.106 | 2.408 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 4600 | MX2 | MX dynamin like GTPase 2 | -2.639 | 4.151 |
| 4599 | MX1 | MX dynamin like GTPase 1 | -3.515 | 1.893 |
| 63977 | PRDM15 | PR/SET domain 15 | -0.696 | 3.098 |
| 25966 | C2CD2 | C2 calcium dependent domain containing 2 | -2.206 | 12.841 |
| 49854 | ZBTB21 | zinc finger and BTB domain containing 21 | -1.014 | 2.214 |
| 7033 | TFF3 | trefoil factor 3 | 2.926 | 2.645 |
| 64699 | TMPRSS3 | transmembrane serine protease 3 | -4.773 | 3.839 |
| 53347 | UBASH3A | ubiquitin associated and SH3 domain containing A | -3.741 | 2.776 |
| 5152 | PDE9A | phosphodiesterase 9A | -6.525 | 6.171 |
| 5316 | PKNOX1 | PBX/knotted 1 homeobox 1 | 0.593 | 1.914 |
| 875 | CBS | cystathione beta-synthase | 3.078 | 2.232 |
| 101928369 | LOC101928369 | uncharacterized LOC101928369 | 2.126 | 2.593 |
| 105377137 | LNCSIK1 | uncharacterized LOC105377137 | -2.005 | 1.543 |
| 150094 | SIK1 | salt inducible kinase 1 | -3.16 | 8.577 |
| 23076 | RRP1B | ribosomal RNA processing 1B | -0.876 | 3.001 |
| 8566 | PDXK | pyridoxal kinase | 1.058 | 11.436 |
| 105372824 | LOC105372824 | uncharacterized LOC105372824 | 1.961 | 7.1 |
| 8568 | RRP1 | ribosomal RNA processing 1 | -1.753 | 11.666 |
| 284837 | AATBC | apoptosis associated transcript in bladder cancer | -3.685 | 30.849 |
| 56894 | AGPAT3 | 1-acylglycerol-3-phosphate O-acyltransferase 3 | -2.071 | 28.383 |
| 7109 | TRAPPC10 | trafficking protein particle complex subunit 10 | 0.287 | 1.356 |
| 8209 | GATD3 | glutamine amidotransferase class 1 domain containing 3 | -0.618 | 2.151 |
| 105377138 | LINC01678 | long intergenic non-protein coding RNA 1678 | -2.431 | 3.773 |
| 105377139 | LOC105377139 | uncharacterized LOC105377139 | -2.192 | 2.348 |
| 23308 | ICOSLG | inducible T cell costimulator ligand | -2.958 | 4.98 |
| 7226 | TRPM2 | transient receptor potential cation channel subfamily M member 2 | 1.447 | 5.688 |
| 101928607 | TRPM2-AS | TRPM2 antisense RNA | 1.417 | 2.729 |
| 7327 | UBE2G2 | ubiquitin conjugating enzyme E2 G2 | -0.662 | 3.321 |
| 100505746 | ITGB2-AS1 | ITGB2 antisense RNA 1 | 0.66 | 1.964 |
| 84536 | LINC01547 | long intergenic non-protein coding RNA 1547 | 1.318 | 3.751 |
| 112268278 | LOC112268278 | | 1.326 | 4.054 |
| 104 | ADARB1 | adenosine deaminase RNA specific B1 | -1.193 | 3.744 |
| 23275 | POFUT2 | protein O-fucosyltransferase 2 | 0.941 | 2.113 |
| 80781 | COL18A1 | collagen type XVIII alpha 1 chain | 2.135 | 6.572 |
| 54039 | PCBP3 | poly(rC) binding protein 3 | 2.62 | 4.196 |
| 1292 | COL6A2 | collagen type VI alpha 2 chain | -3.111 | 2.457 |
| 54058 | C21orf58 | chromosome 21 open reading frame 58 | 2.743 | 3.473 |
| 23181 | DIP2A | disco interacting protein 2 homolog A | 1.696 | 9.577 |
| 100862692 | DIP2A-IT1 | DIP2A intronic transcript 1 | 1.903 | 3.985 |
| 3275 | PRMT2 | protein arginine methyltransferase 2 | 1.122 | 9.575 |
| 23765 | IL17RA | interleukin 17 receptor A | 0.637 | 2.342 |
| 27439 | TMEM121B | transmembrane protein 121B | -1.651 | 3.893 |
| 27440 | HDHD5 | haloacid dehalogenase like hydrolase domain containing 5 | -1.2 | 5.174 |
| 51816 | ADA2 | adenosine deaminase 2 | -3.036 | 12.511 |
| 107985573 | LOC107985573 | uncharacterized LOC107985573 | -4.392 | 7.067 |
| 27443 | CECR2 | CECR2 histone acetyl-lysine reader | 1.614 | 1.696 |
| 529 | ATP6V1E1 | ATPase H+ transporting V1 subunit E1 | 0.535 | 2.474 |
| 57553 | MICAL3 | microtubule associated monooxygenase, calponin and LIM domain containing 3 | -1.099 | 2.691 |
| 11274 | USP18 | ubiquitin specific peptidase 18 | -4.517 | 2.753 |
| 728229 | TMEM191B | transmembrane protein 191B | -1.69 | 3.132 |
| 728233 | PI4KAP1 | phosphatidylinositol 4-kinase alpha pseudogene 1 | -0.875 | 2.6 |
| 6576 | SLC25A1 | solute carrier family 25 member 1 | -1.141 | 7.338 |
| 8218 | CLTCL1 | clathrin heavy chain like 1 | 2.73 | 3.908 |
| 112268289 | LOC112268289 | uncharacterized LOC112268289 | 2.89 | 3.834 |
| 128977 | C22orf39 | chromosome 22 open reading frame 39 | 0.71 | 3.087 |
| 105372860 | UFD1-AS1 | UFD1 antisense RNA 1 | 1.518 | 6.254 |
| 7353 | UFD1 | ubiquitin recognition factor in ER associated degradation 1 | 0.659 | 4.142 |
| 8318 | CDC45 | cell division cycle 45 | 2.956 | 1.422 |
| 5413 | SEPTIN5 | septin 5 | 2.793 | 4.772 |
| 100526833 | SEPT5-GP1BB | SEPT5-GP1BB readthrough | 2.45 | 4.997 |
| 105372861 | LOC105372861 | uncharacterized LOC105372861 | 4.774 | 5.154 |
| 10587 | TXNRD2 | thioredoxin reductase 2 | -0.743 | 1.427 |
| 1312 | COMT | catechol-O-methyltransferase | -1.154 | 7.694 |
| 100616414 | MIR4761 | microRNA 4761 | -1.245 | 4.098 |
| 421 | ARVCF | ARVCF delta catenin family member | -1.349 | 2.422 |
| 29801 | ZDHHC8 | zinc finger DHHC-type palmitoyltransferase 8 | -1.117 | 4.11 |
| 388849 | CCDC188 | coiled-coil domain containing 188 | -1.457 | 1.516 |
| 7625 | ZNF74 | zinc finger protein 74 | -1.241 | 2.511 |
| 84861 | KLHL22 | kelch like family member 22 | 0.525 | 1.488 |
| 84222 | TMEM191A | transmembrane protein 191A (pseudogene) | -1.191 | 2.201 |
| 5297 | PI4KA | phosphatidylinositol 4-kinase alpha | -0.383 | 2.178 |
| 1399 | CRKL | CRK like proto-oncogene, adaptor protein | 0.599 | 2.57 |
| 101928891 | LOC101928891 | long intergenic non-protein coding RNA 1637 | -1.1 | 2.247 |
| 150209 | AIFM3 | apoptosis inducing factor mitochondria associated 3 | -2.291 | 13.013 |
| 80764 | THAP7 | THAP domain containing 7 | -0.658 | 1.902 |
| 23119 | HIC2 | HIC ZBTB transcriptional repressor 2 | -0.725 | 1.853 |
| 645426 | TMEM191C | transmembrane protein 191C | -1.39 | 2.396 |
| 375133 | PI4KAP2 | phosphatidylinositol 4-kinase alpha pseudogene 2 | -0.712 | 2.519 |
| 5594 | MAPK1 | mitogen-activated protein kinase 1 | 0.545 | 1.606 |
| 9647 | PPM1F | protein phosphatase, Mg2+/Mn2+ dependent 1F | -0.868 | 1.92 |
| 28820 | IGLV1-51 | immunoglobulin lambda variable 1-51 | -2.256 | 1.748 |
| 28823 | IGLV1-44 | immunoglobulin lambda variable 1-44 | -3.711 | 3.779 |
| 28825 | IGLV1-40 | immunoglobulin lambda variable 1-40 | -2.526 | 2.617 |
| 28793 | IGLV3-25 | immunoglobulin lambda variable 3-25 | -2.761 | 1.617 |
| 28816 | IGLV2-11 | immunoglobulin lambda variable 2-11 | -4.684 | 3.369 |
| 100423062 | IGLL5 | immunoglobulin lambda like polypeptide 5 | -3.669 | 5.924 |
| 3537 | IGLC1 | immunoglobulin lambda constant 1 | -3.556 | 4.688 |
| 28832 | IGLJ2 | immunoglobulin lambda joining 2 | -3.054 | 3.247 |
| 3538 | IGLC2 | immunoglobulin lambda constant 2 | -2.417 | 2.697 |
| 3539 | IGLC3 | immunoglobulin lambda constant 3 (Kern-Oz+ marker) | -2.248 | 2.542 |
| 9609 | RAB36 | RAB36, member RAS oncogene family | 2.006 | 4.234 |
| 613 | BCR | BCR activator of RhoGEF and GTPase | 1.197 | 10.741 |
| 26226 | FBXW4P1 | F-box and WD repeat domain containing 4 pseudogene 1 | 1.979 | 4.715 |
| 51233 | DRICH1 | aspartate rich 1 | 0.938 | 1.778 |
| 91316 | GUSBP11 | GUSB pseudogene 11 | 1.228 | 11.435 |
| 266747 | RGL4 | ral guanine nucleotide dissociation stimulator like 4 | 2.846 | 10.692 |
| 150248 | C22orf15 | chromosome 22 open reading frame 15 | -1.394 | 3.243 |
| 400016 | CHCHD10 | coiled-coil-helix-coiled-coil-helix domain containing 10 | -1.732 | 10.663 |
| 107985558 | LOC107985558 | | 0.782 | 1.31 |
| 100037417 | DDTL | D-dopachrome tautomerase like | 0.948 | 3.624 |
| 1652 | DDT | D-dopachrome tautomerase | 0.559 | 1.359 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|-----------------|--|----------|----------|
| 23523 | CABIN1 | calcineurin binding protein 1 | 0.865 | 5.74 |
| 101730217 | SPECC1L-ADORA2A | SPECC1L-ADORA2A readthrough (NMD candidate) | 1.245 | 5.298 |
| 23384 | SPECC1L | sperm antigen with calponin homology and coiled-coil domains 1 like | 0.589 | 3.601 |
| 135 | ADORA2A | adenosine A2a receptor | 2.206 | 5.94 |
| 646023 | ADORA2A-AS1 | ADORA2A antisense RNA 1 | 2.008 | 2.887 |
| 51733 | UPB1 | beta-ureidopropionase 1 | 3.22 | 8.76 |
| 83606 | GUCD1 | guanylyl cyclase domain containing 1 | 0.599 | 2.723 |
| 2678 | GGT1 | gamma-glutamyltransferase 1 | 1.287 | 1.942 |
| 388886 | LRRC75B | leucine rich repeat containing 75B | 1.752 | 4.147 |
| 644165 | BCRP3 | BCR pseudogene 3 | 1.485 | 1.896 |
| 646074 | POM121L10P | POM121 transmembrane nucleoporin like 10, pseudogene | 1.313 | 2.24 |
| 91355 | LRP5L | LDL receptor related protein 5 like (pseudogene) | 0.495 | 2.368 |
| 1416 | CRYBB2P1 | crystallin beta B2 pseudogene 1 | 0.92 | 3.199 |
| 157 | GRK3 | G protein-coupled receptor kinase 3 | -2.037 | 13.414 |
| 105372964 | LOC105372964 | seizure related 6 homolog like | -1.554 | 2.606 |
| 23544 | SEZ6L | aspartate beta-hydroxylase domain containing 2 | -7.368 | 17.493 |
| 57168 | ASPHD2 | tutuulin interacting protein 11 | -1.763 | 6.396 |
| 24144 | TFIP11 | tyrosylprotein sulfotransferase 2 | 0.672 | 1.66 |
| 8459 | TPST2 | MN1 proto-oncogene, transcriptional regulator | 0.533 | 1.357 |
| 4330 | MN1 | phosphatidylinositol transfer protein beta | -0.352 | 1.488 |
| 23760 | PITPNB | HscB mitochondrial iron-sulfur cluster cochaperone | -1.462 | 3.766 |
| 150274 | HSCB | growth arrest specific 2 like 1 | -2.046 | 9.154 |
| 10634 | GAS2L1 | adaptor related protein complex 1 subunit beta 1 | -0.897 | 5.995 |
| 162 | AP1B1 | small nucleolar RNA, C/D box 125 | -1.12 | 1.307 |
| 100113380 | SNORD12D | RFPL1 antisense RNA 1 | -3.149 | 3.091 |
| 10740 | RFPL1S | uncharacterized LOC107985541 | -2.532 | 2.053 |
| 107985541 | LOC107985541 | neurofilament heavy chain | -2.074 | 3.407 |
| 4744 | NEFH | nipsnap homolog 1 | -1.086 | 3.536 |
| 8508 | NIPSNAP1 | NF2, moesin-ezrin-radixin like (MERLIN) tumor suppressor | -0.718 | 3.872 |
| 4771 | NF2 | activating signal cointegrator 1 complex subunit 2 | -0.449 | 2.008 |
| 84164 | ASCC2 | myotubularin related protein 3 | 1.107 | 5.016 |
| 8897 | MTMR3 | HORMAD2 and MTMR3 antisense RNA 1 | 0.984 | 3.235 |
| 101929664 | HORMAD2-AS1 | TBC1 domain family member 10A | -0.525 | 1.696 |
| 83874 | TBC1D10A | ring finger protein 215 | 0.888 | 3.587 |
| 200312 | RNF215 | mitochondrial fission process 1 | -0.698 | 1.541 |
| 51537 | MTFP1 | pescadillo ribosomal biogenesis factor 1 | -1.465 | 10.313 |
| 23481 | PES1 | transcobalamin 2 | -1.625 | 2.248 |
| 6948 | TCN2 | solute carrier family 35 member E4 | -0.86 | 1.504 |
| 339665 | SLC35E4 | uncharacterized LOC107985544 | -0.989 | 1.449 |
| 107985544 | LOC107985544 | taurine up-regulated 1 | 0.34 | 2 |
| 55000 | TUG1 | selenoprotein M | -2.578 | 2.435 |
| 140606 | SELENOM | LIM domain kinase 2 | 1.042 | 1.768 |
| 3985 | LIMK2 | phosphoinositide-3-kinase interacting protein 1 | -0.999 | 1.58 |
| 113791 | PIK3IP1 | POZ/BTB and AT hook containing zinc finger 1 | -0.629 | 1.468 |
| 23598 | PATZ1 | eukaryotic translation initiation factor 4E nuclear import factor 1 | 0.67 | 3.959 |
| 56478 | EIF4ENIF1 | SF1 centrin binding protein | 0.559 | 2.465 |
| 9814 | SF1 | YWHAH antisense RNA 1 | 3.03 | 4.39 |
| 25775 | YWHAH-AS1 | tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein eta | 1.739 | 6.228 |
| 7533 | YWHAH | uncharacterized LOC339666 | -1.651 | 1.858 |
| 339666 | LOC339666 | RNA 2',3'-cyclic phosphate and 5'-OH ligase | -1.48 | 3.078 |
| 51493 | RTCB | heme oxygenase 1 | -1.645 | 3.435 |
| 3162 | HMOX1 | apolipoprotein L6 | -1.888 | 4.559 |
| 80830 | APOL6 | RNA binding fox-1 homolog 2 | -0.667 | 3.668 |
| 23543 | RBFOX2 | apolipoprotein L3 | -2.897 | 6.666 |
| 102723507 | LOC102723507 | apolipoprotein L4 | -3.475 | 17.862 |
| 80833 | APOL3 | apolipoprotein L1 | -1.801 | 1.373 |
| 80832 | APOL4 | myosin heavy chain 9 | -1.523 | 2.228 |
| 8542 | APOL1 | microRNA 6819 | -1.428 | 1.569 |
| 112268296 | LOC112268296 | MYH9 divergent transcript | 0.883 | 5.776 |
| 4627 | MYH9 | thioredoxin 2 | 1.758 | 3.414 |
| 102465491 | MIR6819 | eukaryotic translation initiation factor 3 subunit D | 3.374 | 3.294 |
| 105377199 | MYH9-DT | NCF4 antisense RNA 1 | -0.842 | 3.576 |
| 25828 | TXN2 | neutrophil cytosolic factor 4 | 2.151 | 7.259 |
| 8664 | EIF3D | mercaptopyruvate sulfurtransferase | 2.205 | 8.671 |
| 107985578 | NCF4-AS1 | potassium channel tetramerization domain containing 17 | 0.731 | 2.153 |
| 4689 | NCF4 | interleukin 2 receptor subunit beta | -2.56 | 6.579 |
| 4357 | MPST | Rac family small GTPase 2 | -2.67 | 2.106 |
| 79734 | KCTD17 | CDC42 effector protein 1 | 1.28 | 10.011 |
| 3560 | IL2RB | galectin 2 | -4.334 | 2.051 |
| 5880 | RAC2 | SH3 domain binding protein 1 | -4.37 | 2.512 |
| 11135 | CDC42EP1 | PDXP divergent transcript | -1.276 | 6.903 |
| 3957 | LGALS2 | galectin 1 | -1.273 | 6.087 |
| 23616 | SH3BP1 | nucleolar protein 12 | -1.343 | 4.613 |
| 101927051 | PDXP-DT | uncharacterized LOC102724378 | 0.425 | 1.998 |
| 3956 | LGALS1 | uncharacterized LOC105373027 | 1.338 | 2.873 |
| 79159 | NOL12 | BAR/MD domain containing adaptor protein 2 like 2 | 1.472 | 1.655 |
| 102724378 | LOC102724378 | phospholipase A2 group VI | 2.174 | 3.457 |
| 105373027 | LOC105373027 | transmembrane protein 184B | 1.681 | 4.536 |
| 80115 | BAIAP2L2 | TPTEP2-CSNK1E readthrough | 0.709 | 1.661 |
| 8398 | PLA2G6 | TPTEP2 pseudogene 2 | 0.937 | 1.984 |
| 25829 | TMEM184B | DEAD-box helicase 17 | 2.519 | 6.589 |
| 102800317 | TPTEP2-CSNK1E | translocase of outer mitochondrial membrane 22 | 0.63 | 3.106 |
| 400927 | TPTEP2 | GTP binding protein 1 | -0.534 | 2.088 |
| 10521 | DDX17 | Sad1 and UNC84 domain containing 2 | 0.921 | 2.201 |
| 56993 | TOMM22 | chromobox 6 | 0.572 | 3.899 |
| 9567 | GTPBP1 | apolipoprotein B mRNA editing enzyme catalytic subunit 3A | -1.146 | 4.949 |
| 25777 | SUN2 | uncharacterized LOC105373033 | -2.204 | 6.579 |
| 23466 | CBX6 | apolipoprotein B mRNA editing enzyme catalytic subunit 3B | -4.331 | 16.879 |
| 200315 | APOBEC3A | APOBEC3B antisense RNA 1 | -4.513 | 7.768 |
| 105373033 | LOC105373033 | apolipoprotein B mRNA editing enzyme catalytic subunit 3C | -1.137 | 1.409 |
| 107985562 | LOC107985562 | apolipoprotein B mRNA editing enzyme catalytic subunit 3F | -1.683 | 2.46 |
| 9582 | APOBEC3B | apolipoprotein B mRNA editing enzyme catalytic subunit 3D | -1.565 | 5.759 |
| 100874530 | APOBEC3B-AS1 | apolipoprotein B mRNA editing enzyme catalytic subunit 3G | -1.31 | 2.731 |
| 27350 | APOBEC3C | uncharacterized LOC101927202 | -1.862 | 5.482 |
| 200316 | APOBEC3F | small nucleolar RNA, C/D box 83B | -1.129 | 1.98 |
| 140564 | APOBEC3D | small nucleolar RNA, C/D box 83A | 4.595 | 5.944 |
| 60489 | APOBEC3G | small nucleolar RNA, C/D box 139 | 1.734 | 2.644 |
| 101927202 | LOC101927202 | small nucleolar RNA, C/D box 83A | 1.632 | 2.596 |
| 116938 | SNORD83B | small nucleolar RNA, C/D box 83A | 1.084 | 1.886 |
| 116937 | SNORD83A | | | |
| 116936 | SNORD139 | | | |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|--|----------|----------|
| 9145 | SYNGR1 | synaptogyrin 1 | 0.651 | 1.477 |
| 468 | ATF4 | activating transcription factor 4 | 0.965 | 3.352 |
| 91582 | RPS19BP1 | ribosomal protein S19 binding protein 1 | 0.939 | 4.866 |
| 27352 | SGSM3 | small G protein signaling modulator 3 | 0.379 | 1.831 |
| 57591 | MRTFA | myocardin related transcription factor A | 1.397 | 9.805 |
| 6767 | ST13 | ST13 Hsp70 interacting protein | -0.451 | 1.552 |
| 106635682 | SNORD140 | small nucleolar RNA, C/D box 140 | 0.752 | 4.608 |
| 83746 | L3MBTL2 | L3MBTL histone methyl-lysine binding protein 2 | -0.756 | 3.368 |
| 100506544 | L3MBTL2-AS1 | L3MBTL2 antisense RNA 1 | -0.7 | 1.612 |
| 150356 | CHADL | chondroaderin like | -1.036 | 1.743 |
| 23264 | ZC3H7B | zinc finger CCCH-type containing 7B | -0.626 | 3.119 |
| 7008 | TEF | TEF transcription factor, PAR bZIP family member | -2.207 | 9.292 |
| 50 | ACO2 | aconitase 2 | -0.741 | 8.127 |
| 171568 | POLR3H | RNA polymerase III subunit H | -0.858 | 6.657 |
| 5372 | PMM1 | phosphomannomutase 1 | 1.379 | 9.319 |
| 27351 | DESI1 | desumoylating isopeptidase 1 | -0.46 | 2.058 |
| 2547 | XRCC6 | X-ray repair cross complementing 6 | -0.338 | 1.36 |
| 112637020 | SREBF2-AS1 | SREBF2 antisense RNA 1 | 0.576 | 1.741 |
| 6721 | SREBF2 | sterol regulatory element binding transcription factor 2 | 0.655 | 1.883 |
| 440829 | SHISA8 | shisa family member 8 | 0.718 | 2.209 |
| 79019 | CENPM | centromere protein M | 3.244 | 3.133 |
| 164684 | WBP2NL | WBP2 N-terminal like | -1.972 | 22.707 |
| 4668 | NAGA | alpha-N-acetylgalactosaminidase | -1.83 | 17.365 |
| 107985551 | LOC107985551 | uncharacterized LOC107985551 | -2.656 | 1.857 |
| 6942 | TCF20 | transcription factor 20 | -0.47 | 1.364 |
| 101927372 | LOC101927372 | uncharacterized LOC101927372 | -1.517 | 1.938 |
| 107985550 | LOC107985550 | uncharacterized LOC107985550 | 1.017 | 1.675 |
| 638 | BIK | BCL2 interacting killer | 2.276 | 4.286 |
| 706 | TSPO | translocator protein | 1.732 | 15.345 |
| 29780 | PARVB | parvin beta | -1.446 | 5.263 |
| 107987326 | LOC107987326 | retrotransposon Gag like 6 | -2.465 | 2.112 |
| 84247 | RTL6 | nucleoporin 50 | -2.398 | 7.008 |
| 10762 | NUP50 | retrotransposon Gag like 6 | 0.767 | 3.309 |
| 112267891 | LOC112267891 | nucleoporin 50 | 0.994 | 2.73 |
| 105373064 | LOC105373064 | uncharacterized LOC105373064 | 1.018 | 2.347 |
| 23313 | KIAA0930 | KIAA0930 | -0.811 | 2.822 |
| 7380 | UPK3A | upraklin 3A | -4.809 | 11.369 |
| 100271722 | LINC00899 | long intergenic non-protein coding RNA 899 | 1.47 | 6.952 |
| 150381 | PRR34-AS1 | PRR34 antisense RNA 1 | 0.956 | 2.983 |
| 5465 | PPARA | peroxisome proliferator activated receptor alpha | -1.289 | 3.381 |
| 55020 | TTC38 | tetratricopeptide repeat domain 38 | 1.266 | 4.566 |
| 51512 | GTSE1 | G2 and S-phase expressed 1 | 2.976 | 2.837 |
| 9620 | CELSR1 | cadherin EGF LAG seven-pass G-type receptor 1 | -1.633 | 1.593 |
| 107985566 | LOC107985566 | TBC1 domain family member 22A | 3.687 | 2.079 |
| 25771 | TBC1D22A | TBC1 domain family member 22A | -0.844 | 2.807 |
| 100128818 | LPEQ6126 | uncharacterized LOC105377205 | -1.267 | 1.504 |
| 105377205 | LOC105377205 | sterile alpha motif domain-containing protein 1-like | 1.805 | 3.373 |
| 105373091 | LOC105373091 | modulator of VRAC current 1 | 2.144 | 3.236 |
| 23209 | MLC1 | pannexin 2 | 1.814 | 2.262 |
| 56666 | PANX2 | TrAB domain containing | 1.916 | 1.806 |
| 80305 | TRABD | tubulin gamma complex associated protein 6 | 0.849 | 4.801 |
| 85378 | TUBGCP6 | mitogen-activated protein kinase 11 | 0.364 | 1.88 |
| 5600 | MAPK11 | plexin B2 | -1.636 | 2.62 |
| 23654 | PLXNB2 | DENN domain containing 6B | -2.69 | 16.73 |
| 414918 | DENND6B | non-SMC condensin II complex subunit H2 | -2.545 | 9.132 |
| 29781 | NCAPH2 | synthesis of cytochrome C oxidase 2 | -1.303 | 2.219 |
| 9997 | SCO2 | thymidine phosphorylase | -2.775 | 6.931 |
| 1890 | TYMP | outer dense fiber of sperm tails 3B | -2.549 | 7.008 |
| 440836 | ODF3B | uncharacterized LOC102724608 | -2.8 | 7.96 |
| 102724608 | LOC102724608 | KLHDC7B divergent transcript | -2.541 | 3.207 |
| 105373098 | KLHDC7B-DT | kelch domain containing 7B | -2.731 | 3.069 |
| 113730 | KLHDC7B | uncharacterized LOC107985568 | -4.383 | 16.079 |
| 107985568 | LOC107985568 | CHKB-CPT1B readthrough (NMD candidate) | 1.342 | 1.769 |
| 386593 | CHKB-CPT1B | carnitine palmitoyltransferase 1B | 0.495 | 1.663 |
| 1375 | CPT1B | RNA, 18S pre-ribosomal N4 | 1.116 | 2.246 |
| 109864273 | RNA18SN4 | GTP binding protein 6 (putative) | -0.621 | 2.201 |
| 8225 | GTPBP6 | long intergenic non-protein coding RNA 685 | -0.636 | 1.738 |
| 283981 | LINC00685 | protein phosphatase 2 regulatory subunit B"beta | 1.212 | 1.454 |
| 28227 | PPP2R3B | uncharacterized LOC101928032 | 2.226 | 9.496 |
| 101928032 | LOC101928032 | solute carrier family 25 member 6 | -1.495 | 3.121 |
| 293 | SLC25A6 | P2Y receptor family member 8 | -0.926 | 1.805 |
| 286530 | P2RY8 | zinc finger BED-type containing 1 | -0.98 | 2.562 |
| 9189 | ZBED1 | CD99 molecule (Xg blood group) | -1.021 | 2.866 |
| 4267 | CD99 | protein kinase cAMP-dependent X-linked catalytic subunit | -1.518 | 3.413 |
| 5613 | PRKX | steroid sulfatase | -2.159 | 16.923 |
| 412 | STS | holocytchrome c synthase | -1.044 | 1.625 |
| 3052 | HCCS | toll like receptor 7 | -1.014 | 5.523 |
| 51284 | TLR7 | toll like receptor 8 | -4.272 | 25.153 |
| 51311 | TLR8 | thymosin beta 4 X-linked | -1.428 | 1.583 |
| 7114 | TMSB4X | family with sequence similarity 9 member C | 0.563 | 1.962 |
| 171484 | FAM9C | transcription elongation factor A N-terminal and central domain containing | 3.209 | 2.372 |
| 170082 | TCEANC | RAB9A, member RAS oncogene family | 1.135 | 2.561 |
| 9367 | RAB9A | trafficking protein particle complex subunit 2 | 0.745 | 1.947 |
| 6399 | TRAPPC2 | OFD1 centriolar and centriolar satellite protein | 0.911 | 3.341 |
| 8481 | OFD1 | FA complementation group B | 1.309 | 5.075 |
| 2187 | FANCB | BMX non-receptor tyrosine kinase | 1.973 | 3.255 |
| 660 | BMX | carbonic anhydrase 5B | 4.267 | 10.193 |
| 11238 | CA5B | zinc finger CCCH-type, RNA binding motif and serine/arginine rich 2 | -0.801 | 1.85 |
| 8233 | ZRSR2 | adaptor related protein complex 1 subunit sigma 2 | -0.82 | 3.485 |
| 8905 | AP1S2 | RALBP1 associated Eps domain containing 2 | -1.528 | 17.697 |
| 9185 | REPS2 | NHS actin remodeling regulator | 1.684 | 8.577 |
| 4810 | NHS | Scm polycomb group protein like 1 | -1.665 | 1.851 |
| 6322 | SCML1 | Scm polycomb group protein like 2 | -2.914 | 12.158 |
| 10389 | SCML2 | cyclin dependent kinase like 5 | 1.817 | 2.764 |
| 6792 | CDKL5 | protein phosphatase with EF-hand domain 1 | 1.354 | 5.65 |
| 5475 | PPEF1 | PHKA2 antisense RNA 1 | 3.095 | 9.461 |
| 100132163 | PHKA2-AS1 | phosphorylase kinase regulatory subunit alpha 2 | 0.922 | 4.303 |
| 5256 | PHKA2 | uncharacterized LOC101928415 | 0.712 | 2.645 |
| 5160 | PDHA1 | pyruvate dehydrogenase E1 subunit alpha 1 | 0.998 | 1.924 |
| 389840 | MAP3K15 | mitogen-activated protein kinase kinase kinase 15 | 1.381 | 6.928 |
| | | | 1.779 | 5.105 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|----------------|---|----------|----------|
| 256643 | BCLAF3 | BCLAF1 and THRAP3 family member 3 | 0.679 | 2.398 |
| 6611 | SMS | spermine synthase | -0.689 | 5.01 |
| 10549 | PRDX4 | peroxiredoxin 4 | -1.306 | 5.194 |
| 23597 | ACOT9 | acyl-CoA thioesterase 9 | -0.931 | 2.486 |
| 105373148 | LOC105373148 | uncharacterized LOC105373148 | -2.006 | 3.213 |
| 6303 | SAT1 | spermidine/spermine N1-acetyltransferase 1 | -1.168 | 2.005 |
| 80311 | KLHL15 | kelch like family member 15 | 0.831 | 1.374 |
| 1968 | EIF2S3 | eukaryotic translation initiation factor 2 subunit gamma | -0.558 | 1.743 |
| 80231 | TASL | TLR adaptor interacting with endolysosomal SLC15A4 | -0.999 | 2.06 |
| 5638 | PRRG1 | proline rich and Gla domain 1 | -1.438 | 1.696 |
| 6103 | RPGR | retinitis pigmentosa GTPase regulator | 0.683 | 1.586 |
| 58526 | MID1P1 | MID1 interacting protein 1 | 0.903 | 2.274 |
| 8573 | CASK | calcium/calmodulin dependent serine protein kinase | -0.897 | 2.264 |
| 27197 | GPR82 | G protein-coupled receptor 82 | -1.829 | 1.46 |
| 4128 | MAOA | monoamine oxidase A | 4.816 | 4.352 |
| 80258 | EFHC2 | EF-hand domain containing 2 | 2.755 | 5.712 |
| 55634 | KRBOX4 | KRAB box domain containing 4 | -0.738 | 1.885 |
| 56548 | CHST7 | carbohydrate sulfotransferase 7 | -1.232 | 1.942 |
| 84679 | SLC9A7 | solute carrier family 9 member A7 | -2.178 | 4.066 |
| 6102 | RP2 | RP2 activator of ARL3 GTPase | 0.841 | 3.216 |
| 8237 | USP11 | ubiquitin specific peptidase 11 | -1.608 | 7.249 |
| 7076 | TIMP1 | TIMP metallopeptidase inhibitor 1 | -1.214 | 2.316 |
| 7569 | ZNF182 | zinc finger protein 182 | 0.627 | 2.608 |
| 57232 | ZNF630 | zinc finger protein 630 | 1.323 | 3.072 |
| 10682 | EBP | EBP cholestenol delta-isomerase | 1.917 | 14.075 |
| 6839 | SUV39H1 | SUV39H1 histone lysine methyltransferase | 1.028 | 3.182 |
| 10084 | PQBP1 | polyglutamine binding protein 1 | -0.522 | 1.485 |
| 3750 | KCND1 | potassium voltage-gated channel subfamily D member 1 | 0.758 | 1.343 |
| 90060 | CCDC120 | coiled-coil domain containing 120 | 0.655 | 1.524 |
| 105373195 | LOC105373195 | uncharacterized LOC105373195 | 1.776 | 3.927 |
| 79917 | MAGIX | MAGI family member, X-linked | 0.92 | 2.034 |
| 28952 | CCDC22 | coiled-coil domain containing 22 | 0.488 | 2.157 |
| 89801 | PPP1R3F | protein phosphatase 1 regulatory subunit 3F | 0.5 | 1.547 |
| 158572 | USP27X-DT | USP27X divergent transcript | -3.549 | 3.225 |
| 389856 | USP27X | ubiquitin specific peptidase 27 X-linked | -2.088 | 3.362 |
| 1184 | CLCN5 | chloride voltage-gated channel 5 | -1.375 | 6.703 |
| 57477 | SHROOM4 | shroom family member 4 | 2.743 | 3.02 |
| 23708 | GSPT2 | G1 to S phase transition 2 | -3.057 | 3.5 |
| 9500 | MAGED1 | MAGE family member D1 | -0.913 | 1.827 |
| 727866 | FAM156B | family with sequence similarity 156 member B | -0.828 | 3.342 |
| 29057 | FAM156A | family with sequence similarity 156 member A | -0.819 | 3.538 |
| 102723508 | KANTR | KANTR integral membrane protein | -1.086 | 1.475 |
| 23096 | IQSEC2 | IQ motif and Sec7 domain ArfGEF 2 | -2.897 | 12.221 |
| 10075 | HUWE1 | HECT, UBA and WWE domain containing E3 ubiquitin protein ligase 1 | -0.57 | 2.442 |
| 54954 | FAM120C | family with sequence similarity 120C | -0.783 | 1.792 |
| 10916 | MAGED2 | MAGE family member D2 | -0.816 | 3.785 |
| 28986 | MAGEH1 | MAGE family member H1 | -3.296 | 10.752 |
| 11279 | KLF8 | KLF transcription factor 8 | -2.093 | 2.008 |
| 550643 | NBDY | negative regulator of P-body association | -1.069 | 2.044 |
| 169981 | SPIN3 | spindlin family member 3 | -3.336 | 12.913 |
| 474343 | SPIN2B | spindlin family member 2B | -1.35 | 2.24 |
| 158586 | ZXDB | zinc finger X-linked duplicated B | -0.902 | 1.495 |
| 139886 | SPIN4 | spindlin family member 4 | 1.346 | 1.845 |
| 23229 | ARHGEF9 | Cdc42 guanine nucleotide exchange factor 9 | -0.754 | 1.372 |
| 139285 | AMER1 | APC membrane recruitment protein 1 | -2.226 | 9.675 |
| 55906 | ZC4H2 | zinc finger C4H2-type containing | -1.432 | 2.506 |
| 81887 | LAS1L | LAS1 like ribosome biogenesis factor | -0.721 | 2.838 |
| 407008 | MIR223 | microRNA 223 | 1.888 | 4.154 |
| 11326 | VSIG4 | V-set and immunoglobulin domain containing 4 | 3.38 | 2.153 |
| 4983 | OPHN1 | oligophrenin 1 | -1.932 | 3.829 |
| 1947 | EFNB1 | ephrin B1 | -2.712 | 11.305 |
| 64219 | PJA1 | praja ring finger ubiquitin ligase 1 | -2.114 | 7.177 |
| 107985683 | LOC107985683 | uncharacterized LOC107985683 | 1.554 | 1.474 |
| 51248 | PDZD11 | PDZ domain containing 11 | -0.838 | 2.521 |
| 24137 | KIF4A | kinesin family member 4A | 3.117 | 2.782 |
| 158830 | CXorf65 | chromosome X open reading frame 65 | 1.063 | 2.994 |
| 9968 | MED12 | mediator complex subunit 12 | 0.571 | 1.461 |
| 54413 | NLGN3 | neuroligin 3 | 0.837 | 2.639 |
| 107985688 | LOC107985688 | uncharacterized LOC107985688 | -1.373 | 1.605 |
| 9203 | ZMYM3 | zinc finger MYM-type containing 3 | -1.077 | 3.887 |
| 26548 | ITGB1BP2 | integrin subunit beta 1 binding protein 2 | 1.228 | 1.521 |
| 8473 | OGT | O-linked N-acetylglucosamine (GlcNAc) transferase | 0.998 | 5.953 |
| 340526 | RTL5 | retrotransposon Gag like 5 | -1.898 | 5.037 |
| 54821 | ERCC6L | ERCC excision repair 6 like, spindle assembly checkpoint helicase | 2.779 | 3.005 |
| 53344 | CHIC1 | cysteine rich hydrophobic domain 1 | -2.095 | 3.181 |
| 139596 | UPRT | uracil phosphoribosyltransferase homolog | -0.796 | 1.879 |
| 441531 | PGAM4 | phosphoglycerate mutase family member 4 | 0.513 | 1.912 |
| 5230 | PGK1 | phosphoglycerate kinase 1 | 0.552 | 3.327 |
| 10800 | CYSLTR1 | cysteinyl leukotriene receptor 1 | -2.21 | 4.341 |
| 27334 | P2RY10 | P2Y receptor family member 10 | -3.019 | 2.393 |
| 84636 | GPR174 | G protein-coupled receptor 174 | -4.643 | 5.249 |
| 79366 | HMGN5 | high mobility group nucleosome binding domain 5 | 0.804 | 1.328 |
| 139324 | HDX | highly divergent homeobox | -4.082 | 13.985 |
| 1121 | CHM | CHM Rab escort protein | -0.595 | 2.39 |
| 2491 | CENPI | centromere protein I | 2.821 | 2.268 |
| 695 | BTK | Bruton tyrosine kinase | -0.849 | 4.485 |
| 100529097 | RPL36A-HNRNPH2 | RPL36A-HNRNPH2 readthrough | -0.504 | 2.262 |
| 6173 | RPL36A | ribosomal protein L36a | -0.795 | 4.027 |
| 51309 | ARMCX1 | armadillo repeat containing X-linked 1 | -2.003 | 2.179 |
| 9823 | ARMCX2 | armadillo repeat containing X-linked 2 | -3.588 | 2.623 |
| 100528062 | ARMCX5-GPRASP2 | ARMCX5-GPRASP2 readthrough | 0.771 | 1.772 |
| 9737 | GPRASP1 | G protein-coupled receptor associated sorting protein 1 | -1.871 | 2.582 |
| 80823 | GPRASP3 | G protein-coupled receptor associated sorting protein family member 3 | 2.618 | 3.709 |
| 100287765 | LINC00630 | long intergenic non-protein coding RNA 630 | 1.871 | 2.214 |
| 55859 | BEX1 | brain expressed X-linked 1 | 3.085 | 3.145 |
| 56000 | NXF3 | nuclear RNA export factor 3 | 3.449 | 3.351 |
| 9338 | TCEAL1 | transcription elongation factor A like 1 | -0.944 | 1.348 |
| 644353 | ZCCHC18 | zinc finger CCHC-type containing 18 | 1.101 | 1.394 |
| 286437 | LOC286437 | uncharacterized LOC286437 | 0.704 | 1.829 |
| 79710 | MORC4 | MORC family CW-type zinc finger 4 | -2.957 | 3.129 |
| 1831 | TSC22D3 | TSC22 domain family member 3 | 0.708 | 1.411 |

| Column 1 | Column 2 | Column 3 | Column 4 | Column 5 |
|-----------|--------------|---|----------|----------|
| 2182 | ACSL4 | acyl-CoA synthetase long chain family member 4 | -1.774 | 4.957 |
| 105373311 | LOC105373311 | uncharacterized LOC105373311 | -0.883 | 1.604 |
| 79868 | ALG13 | ALG13 UDP-N-acetylglucosaminyltransferase subunit | -1.041 | 5.477 |
| 154796 | AMOT | angiomitin | -2.703 | 2.192 |
| 3597 | IL13RA1 | interleukin 13 receptor subunit alpha 1 | -1.014 | 3.957 |
| 203427 | SLC25A43 | solute carrier family 25 member 43 | -1.828 | 13.969 |
| 347454 | SOWAHD | sosondowah ankyrin repeat domain family member D | 1.018 | 1.892 |
| 4694 | NDUFA1 | NADH:ubiquinone oxidoreductase subunit A1 | 0.448 | 2.775 |
| 55026 | TMEM255A | transmembrane protein 255A | -2.178 | 2.309 |
| 2747 | GLUD2 | glutamate dehydrogenase 2 | -1.466 | 4.196 |
| 57187 | THOC2 | THO complex subunit 2 | -0.422 | 1.73 |
| 10735 | STAG2 | stromal antigen 2 | 0.425 | 1.48 |
| 10178 | TENM1 | teneurin transmembrane protein 1 | 3.133 | 6.705 |
| 4952 | OCRL | OCRL inositol polyphosphate-5-phosphatase | 1.096 | 3.831 |
| 10813 | UTP14A | UTP14A small subunit processome component | -1.197 | 7.611 |
| 63035 | BCORL1 | BCL6 corepressor like 1 | 1.534 | 4.85 |
| 9363 | RAB33A | RAB33A, member RAS oncogene family | 1.34 | 3.139 |
| 9131 | AIFM1 | apoptosis inducing factor mitochondria associated 1 | -0.511 | 1.66 |
| 10495 | ENOX2 | ecto-NOX disulfide-thiol exchanger 2 | -0.674 | 2.721 |
| 286467 | FIRRE | firre intergenic repeating RNA element | -1.751 | 2.19 |
| 51765 | STK26 | serine/threonine kinase 26 | 1.312 | 5.016 |
| 90167 | FRMD7 | FERM domain containing 7 | 1.646 | 3.487 |
| 57826 | RAP2C | RAP2C, member of RAS oncogene family | 0.732 | 2.847 |
| 55796 | MBNL3 | muscleblind like splicing regulator 3 | -1.393 | 9.755 |
| 84848 | MIR503HG | MIR503 host gene | 2.353 | 5.395 |
| 159090 | PABIR2 | PABIR family member 2 | 0.557 | 1.639 |
| 56180 | MOSPD1 | motile sperm domain containing 1 | 1.603 | 9.168 |
| 644538 | SMIM10 | small integral membrane protein 10 | 2.605 | 3.899 |
| 441518 | RTL8B | retrotransposon Gag like 8B | -2.268 | 1.823 |
| 8933 | RTL8C | retrotransposon Gag like 8C | -0.758 | 2.793 |
| 112268301 | LOC112268301 | | -2.007 | 4.157 |
| 26071 | RTL8A | retrotransposon Gag like 8A | -0.766 | 2.561 |
| 7626 | ZNF75D | zinc finger protein 75D | 1.308 | 5.037 |
| 105373342 | LOC105373342 | uncharacterized LOC105373342 | 0.984 | 1.965 |
| 399668 | SMIM10L2A | small integral membrane protein 10 like 2A | 2.578 | 3.534 |
| 2332 | FMR1 | fragile X messenger ribonucleoprotein 1 | -0.493 | 1.659 |
| 2334 | AFF2 | ALF transcription elongation factor 2 | 2.956 | 3.213 |
| 83692 | CD99L2 | CD99 molecule like 2 | -0.556 | 1.618 |
| 3149 | HMG B3 | high mobility group box 3 | 2.021 | 6.721 |
| 1069 | CETN2 | centrin 2 | 0.92 | 2.994 |
| 7739 | ZNF185 | zinc finger protein 185 with LIM domain | -1.456 | 3.327 |
| 105373372 | LOC105373372 | uncharacterized LOC105373372 | -1.82 | 2.427 |
| 114824 | PNMA5 | PNMA family member 5 | -3.657 | 3.96 |
| 29944 | PNMA3 | PNMA family member 3 | -1.8 | 1.833 |
| 10838 | ZNF275 | zinc finger protein 275 | -0.715 | 1.935 |
| 139735 | ZFP92 | ZFP92 zinc finger protein | 1.532 | 4.378 |
| 55559 | HAUS7 | HAUS augmin like complex subunit 7 | -0.691 | 1.958 |
| 92002 | CCNQ | cyclin Q | -0.657 | 1.917 |
| 215 | ABCD1 | ATP binding cassette subfamily D member 1 | -0.914 | 3.984 |
| 3421 | IDH3G | isocitrate dehydrogenase (NAD(+)) 3 non-catalytic subunit gamma | -0.519 | 1.576 |
| 393 | ARHGAP4 | Rho GTPase activating protein 4 | 0.495 | 2.152 |
| 2316 | FLNA | filamin A | -0.398 | 3.093 |
| 6134 | RPL10 | ribosomal protein L10 | -0.648 | 1.639 |
| 1774 | DNASE1L1 | deoxyribonuclease 1 like 1 | 0.353 | 1.669 |
| 6901 | TAFAZZIN | tafazzin, phospholipid-lysophospholipid transacylase | 1.366 | 16.971 |
| 2664 | GDI1 | GDP dissociation inhibitor 1 | 0.52 | 2.862 |
| 8273 | SLC10A3 | solute carrier family 10 member 3 | 1.034 | 5.051 |
| 2539 | G6PD | glucose-6-phosphate dehydrogenase | 1.525 | 11.699 |
| 139716 | GAB3 | GRB2 associated binding protein 3 | -0.673 | 4.105 |
| 8263 | F8A1 | coagulation factor VIII associated 1 | 0.635 | 1.548 |
| 4515 | MTCP1 | mature T cell proliferation 1 | 0.58 | 1.309 |
| 7411 | VBP1 | VHL binding protein 1 | 1.208 | 4.55 |
| 1193 | CLIC2 | chloride intracellular channel 2 | -1.596 | 4.129 |
| 101927830 | LOC101927830 | uncharacterized LOC101927830 | 2.042 | 3.164 |
| 100507404 | TMLHE-AS1 | TMLHE antisense RNA 1 | 2.213 | 3.057 |
| 10251 | SPRY3 | sprouty RTK signaling antagonist 3 | 1.648 | 4.158 |
| 107987337 | ZFY-AS1 | ZFY antisense RNA 1 | 3.378 | 1.617 |
| 283788 | LOC283788 | FSHD region gene 1 pseudogene | -0.992 | 1.626 |
| 100008588 | RNA18SN5 | RNA, 18S ribosomal N5 | -0.647 | 2.301 |
| 112268313 | LOC112268313 | | 1.137 | 2.088 |
| 101929819 | LOC101929819 | putative uncharacterized protein FLJ44672 | 1.315 | 3.727 |
| 107987399 | LOC107987399 | replaced by ID 101929819 | 1.481 | 2.87 |
| 107987398 | LOC107987398 | replaced by ID 101929819 | 1.374 | 2.223 |
| 4549 | RNR1 | s-rRNA | 0.913 | 2.446 |
| 4550 | RNR2 | I-rRNA | 0.69 | 1.809 |
| 4512 | COX1 | cytochrome c oxidase subunit I | 0.691 | 2.051 |
| 4574 | TRNS1 | tRNA-Ser | 0.681 | 1.335 |
| 4514 | COX3 | cytochrome c oxidase subunit III | 0.975 | 2.453 |