## Appendix table A.3.4.1. Full list of differentially expressed genes in the endothelial and foetal/tumour contrasts

| Gene | Endo Up | Log2 (FC) | Q value | Raw Endo | Raw NonEndo | Angiogen Up | Log2 (FC) | Q value | Raw Angio | Raw NonAngio |
|---|---|---|---|---|---|---|---|---|---|---|
| **MMP1** | Up | 12.1 | 0.0 | 2767 | 0 | Up | 1.4 | 0.3 | 13 | 3 |
| **MYCT1** | Up | 8.5 | 0.0 | 221 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **ANGPT2** | Up | 10.7 | 0.0 | 1022 | 0 | Up | 2.3 | 0.0 | 17 | 2 |
| **LOC100505937** | Up | 8.5 | 0.0 | 228 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC100216001** | Up | 7.4 | 0.0 | 104 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **TBX15** | Up | 6.2 | 0.0 | 47 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **CLDN11** | Up | 10.7 | 0.0 | 11053 | 1 | Up | 0.9 | 0.4 | 15 | 5 |
| **ADAMTS6** | Up | 5.0 | 0.0 | 20 | 0 | Up | 6.2 | 0.0 | 12 | 0 |
| **PCDH12** | Up | 5.5 | 0.0 | 28 | 0 | Up | 5.6 | 0.0 | 8 | 0 |
| **FLJ41200** | Up | 9.9 | 0.0 | 591 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **RNF126P1** | Up | 9.3 | 0.0 | 399 | 0 | Up | 1.6 | 0.0 | 36 | 7 |
| **CD163L1** | Up | 6.3 | 0.0 | 48 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **ADAMTS18** | Up | 4.5 | 0.1 | 14 | 0 | Up | 6.2 | 0.0 | 12 | 0 |
| **FGF18** | Up | 3.7 | 0.2 | 8 | 0 | Up | 6.9 | 0.0 | 19 | 0 |
| **MUC21** | Up | 5.1 | 0.0 | 21 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **MMRN1** | Up | 9.5 | 0.0 | 463 | 0 | Up | 1.0 | 0.4 | 13 | 4 |
| **SIGLEC16** | Up | 8.7 | 0.0 | 265 | 0 | Up | 1.6 | 0.0 | 53 | 11 |
| **EXO1** | Up | 3.9 | 0.2 | 9 | 0 | Up | 6.3 | 0.0 | 13 | 0 |
| **DNMT3A** | Up | 6.8 | 0.0 | 71 | 0 | Up | 3.2 | 0.0 | 104 | 7 |
| **LY96** | Up | 5.7 | 0.0 | 33 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **KCNMB3** | Up | 4.3 | 0.1 | 12 | 0 | Up | 5.6 | 0.0 | 8 | 0 |
| **ECSCR** | Up | 8.3 | 0.0 | 200 | 0 | Up | 1.6 | 0.2 | 15 | 3 |
| **LOC100506304** | Up | 6.0 | 0.0 | 41 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC286297** | Up | 3.9 | 0.2 | 9 | 0 | Up | 5.8 | 0.0 | 9 | 0 |
| **NMU** | Up | 4.0 | 0.2 | 10 | 0 | Up | 5.6 | 0.0 | 8 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **C18orf54** | Up | 7.8 | 0.0 | 143 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **CDH5** | Up | 8.5 | 0.0 | 218 | 0 | Up | 1.1 | 0.4 | 11 | 3 |
| **LINC00348** | Up | 5.3 | 0.0 | 25 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **CCDC18** | Up | 3.7 | 0.2 | 8 | 0 | Up | 5.8 | 0.0 | 9 | 0 |
| **ROBO4** | Up | 8.0 | 0.0 | 160 | 0 | Up | 1.4 | 0.1 | 22 | 5 |
| **RGS7** | Up | 3.7 | 0.2 | 8 | 0 | Up | 5.6 | 0.0 | 8 | 0 |
| **LOC100506731** | Up | 3.9 | 0.2 | 9 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **LOC100885775** | Up | 3.9 | 0.2 | 9 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **ATP5H** | Up | 8.3 | 0.0 | 198 | 0 | Up | 0.9 | 0.1 | 52 | 17 |
| **SEMA3G** | Up | 4.2 | 0.1 | 11 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **VWF** | Up | 8.8 | 0.0 | 280 | 0 | Up | 0.3 | 0.6 | 62 | 32 |
| **KCNAB1** | Up | 8.0 | 0.0 | 156 | 0 | Up | 1.0 | 0.3 | 20 | 6 |
| **SPIC** | Up | 8.9 | 0.0 | 295 | 0 | Up | 0.1 | 0.9 | 14 | 8 |
| **BHLHB9** | Up | 3.5 | 0.3 | 7 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **LOC100506551** | Up | 3.5 | 0.3 | 7 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **FAM181B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 8.1 | 0.0 | 43 | 0 |
| **MOV10L1** | Up | 4.6 | 0.1 | 15 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **CXorf41** | Up | 3.0 | 0.4 | 5 | 0 | Up | 5.8 | 0.0 | 9 | 0 |
| **SKA3** | Up | 3.0 | 0.4 | 5 | 0 | Up | 5.8 | 0.0 | 9 | 0 |
| **FBXW4P1** | Up | 3.9 | 0.2 | 9 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **TXLNB** | Up | 3.9 | 0.2 | 9 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **ZNF600** | Up | 3.9 | 0.2 | 9 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **ERG** | Up | 7.4 | 0.0 | 105 | 0 | Up | 1.4 | 0.1 | 22 | 5 |
| **LOC100505634** | Up | 4.2 | 0.1 | 11 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100507254** | Up | 6.0 | 0.0 | 41 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC646999** | Up | 5.1 | 0.0 | 21 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **ZNF625-ZNF20** | Up | 5.1 | 0.0 | 21 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **CENPE** | Up | 6.3 | 0.0 | 48 | 0 | Up | 2.5 | 0.0 | 19 | 2 |
| **ESM1** | Up | 8.4 | 0.0 | 2231 | 1 | Up | 0.3 | 0.9 | 4 | 2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MMP10** | Up | 7.5 | 0.0 | 109 | 0 | Up | 1.1 | 0.4 | 11 | 3 |
| **LOC100505491** | Up | 8.6 | 0.0 | 237 | 0 | Up | 0.0 | 1.0 | 10 | 6 |
| **GIMAP6** | Up | 7.4 | 0.0 | 102 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **LOC100506800** | Up | 4.9 | 0.1 | 18 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **IL20RB** | Up | 7.6 | 0.0 | 121 | 0 | Up | 0.9 | 0.1 | 47 | 15 |
| **SPHAR** | Up | 2.7 | 0.4 | 4 | 0 | Up | 5.8 | 0.0 | 9 | 0 |
| **APLN** | Up | 7.8 | 0.0 | 134 | 0 | Up | 0.8 | 0.4 | 17 | 6 |
| **ZNF763** | Up | 3.3 | 0.3 | 6 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **ZNF587B** | Up | 6.5 | 0.0 | 57 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **LOC100506158** | Up | 4.8 | 0.1 | 17 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **HTN3** | Up | 5.6 | 0.0 | 31 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ANXA2P1** | Up | 3.7 | 0.2 | 8 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **C2orf27A** | Up | 3.7 | 0.2 | 8 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **FAM138A** | Up | 3.7 | 0.2 | 8 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LYSMD1** | Up | 8.3 | 0.0 | 201 | 0 | Up | 0.0 | 1.0 | 38 | 23 |
| **GALNTL2** | Up | 7.0 | 0.0 | 80 | 0 | Up | 1.3 | 0.0 | 41 | 10 |
| **PTX3** | Up | 2.0 | 0.0 | 101 | 4 | Up | 6.3 | 0.0 | 13 | 0 |
| **GOLGA6L10** | Up | 1.8 | 0.6 | 2 | 0 | Up | 6.5 | 0.0 | 15 | 0 |
| **MRPS14** | Up | 7.5 | 0.0 | 114 | 0 | Up | 0.7 | 0.4 | 21 | 8 |
| **LOC100130557** | Up | 2.3 | 0.5 | 3 | 0 | Up | 5.8 | 0.0 | 9 | 0 |
| **ZNF134** | Up | 2.3 | 0.5 | 3 | 0 | Up | 5.8 | 0.0 | 9 | 0 |
| **C5orf63** | Up | 4.9 | 0.1 | 19 | 0 | Up | 3.2 | 0.0 | 16 | 1 |
| **LOC440040** | Up | 7.3 | 0.0 | 95 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **TSC22D1-AS1** | Up | 5.4 | 0.0 | 27 | 0 | Up | 2.6 | 0.1 | 11 | 1 |
| **SLC12A2** | Up | 7.0 | 0.0 | 3355 | 4 | Up | 1.0 | 0.1 | 58 | 18 |
| **FANCB** | Up | 3.0 | 0.4 | 5 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC645513** | Up | 3.0 | 0.4 | 5 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC100652733** | Up | 5.2 | 0.0 | 23 | 0 | Up | 2.8 | 0.0 | 46 | 4 |
| **LOC100507265** | Up | 1.8 | 0.6 | 2 | 0 | Up | 6.2 | 0.0 | 12 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **KPNA5** | Up | 2.7 | 0.4 | 4 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **LOC100507286** | Up | 3.3 | 0.3 | 6 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **RNY1** | Up | 3.3 | 0.3 | 6 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **MORC2-AS1** | Up | 7.2 | 0.0 | 93 | 0 | Up | 0.7 | 0.5 | 16 | 6 |
| **FCGR1A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 7.1 | 0.0 | 22 | 0 |
| **LOC100131047** | Up | 5.1 | 0.0 | 21 | 0 | Up | 2.8 | 0.1 | 12 | 1 |
| **LOC100652850** | Up | 7.4 | 0.0 | 104 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **PLK1S1** | Up | 7.7 | 0.0 | 125 | 0 | Up | 0.2 | 0.8 | 40 | 22 |
| **TNFSF4** | Up | 6.0 | 0.0 | 40 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **LOC154761** | Up | 4.7 | 0.1 | 16 | 0 | Up | 3.1 | 0.0 | 15 | 1 |
| **B3GALTL** | Up | 7.6 | 0.0 | 118 | 0 | Up | 0.2 | 0.9 | 15 | 8 |
| **FREM3** | Up | 3.5 | 0.3 | 7 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **ACYP1** | Up | 4.5 | 0.1 | 14 | 0 | Up | 3.3 | 0.0 | 17 | 1 |
| **PLSCR4** | Up | 7.7 | 0.0 | 128 | 0 | Up | 0.1 | 1.0 | 12 | 7 |
| **TMEM59L** | Up | 6.5 | 0.0 | 57 | 0 | Up | 1.2 | 0.0 | 76 | 20 |
| **RPL13AP17** | Up | 2.3 | 0.1 | 33 | 1 | Up | 5.5 | 0.1 | 7 | 0 |
| **CHST8** | Up | 1.8 | 0.6 | 2 | 0 | Up | 6.0 | 0.0 | 10 | 0 |
| **LOC100506014** | Up | 1.8 | 0.6 | 2 | 0 | Up | 6.0 | 0.0 | 10 | 0 |
| **REM2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 6.0 | 0.0 | 10 | 0 |
| **CCRL2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC100132352** | Up | 2.7 | 0.4 | 4 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **ZBTB25** | Up | 2.7 | 0.4 | 4 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC100505534** | Up | 3.0 | 0.4 | 5 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100505577** | Up | 3.0 | 0.4 | 5 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **SPARCL1** | Up | 7.3 | 0.0 | 99 | 0 | Up | 0.4 | 0.2 | 152 | 72 |
| **CENPW** | Up | 5.5 | 0.0 | 28 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **LOC100506528** | Up | 2.2 | 0.0 | 60 | 2 | Up | 5.5 | 0.1 | 7 | 0 |
| **ASPM** | Up | 5.4 | 0.0 | 26 | 0 | Up | 2.2 | 0.1 | 16 | 2 |
| **KIAA1210** | Up | 7.4 | 0.0 | 103 | 0 | Up | 0.2 | 0.9 | 2 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SLC38A3** | Up | 6.3 | 0.0 | 50 | 0 | Up | 1.3 | 0.2 | 16 | 4 |
| **SHE** | Up | 7.1 | 0.0 | 86 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **CCL20** | Up | 4.2 | 0.1 | 11 | 0 | Up | 3.4 | 0.0 | 36 | 2 |
| **FLJ44881** | Up | 2.3 | 0.5 | 3 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **LOC100303749** | Up | 2.3 | 0.5 | 3 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **LOC100506929** | Up | 2.3 | 0.5 | 3 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **DCD** | Up | 3.3 | 0.3 | 6 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **MIS18BP1** | Up | 6.9 | 0.0 | 74 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **RASSF3** | Up | 6.9 | 0.0 | 74 | 0 | Up | 0.6 | 0.5 | 17 | 7 |
| **LIX1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.6 | 0.0 | 8 | 0 |
| **LOC100506775** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.6 | 0.0 | 8 | 0 |
| **LOC100509213** | Up | 2.7 | 0.4 | 4 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **MTRNR2L4** | Up | 2.7 | 0.4 | 4 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **C3orf58** | Up | 7.1 | 0.0 | 87 | 0 | Up | 0.2 | 0.8 | 25 | 13 |
| **REG3A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 6.5 | 0.0 | 15 | 0 |
| **DCLK1** | Up | 5.6 | 0.0 | 30 | 0 | Up | 1.8 | 0.0 | 45 | 8 |
| **SOX4** | Up | 6.0 | 0.0 | 5939 | 15 | Up | 1.4 | 0.0 | 253 | 60 |
| **GLCE** | Up | 6.7 | 0.0 | 66 | 0 | Up | 0.6 | 0.5 | 15 | 6 |
| **RBMS3** | Up | 4.8 | 0.0 | 187 | 1 | Up | 2.6 | 0.0 | 20 | 2 |
| **AXL** | Up | 7.3 | 0.0 | 6927 | 7 | Up | 0.0 | 0.9 | 47 | 28 |
| **BMP6** | Up | 6.7 | 0.0 | 66 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **ZNF738** | Up | 5.4 | 0.0 | 26 | 0 | Up | 1.9 | 0.1 | 19 | 3 |
| **CELF4** | Up | 5.7 | 0.0 | 33 | 0 | Up | 1.6 | 0.0 | 44 | 9 |
| **FDXACB1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC285419** | Up | 2.3 | 0.5 | 3 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **SEC1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **TOB2P1** | Up | 3.0 | 0.4 | 5 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **ZNF521** | Up | 6.6 | 0.0 | 61 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **LPAR6** | Up | 7.0 | 0.0 | 82 | 0 | Up | 0.2 | 0.8 | 22 | 12 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **FAM54A** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **LOC100508782** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **MARCH4** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **POLQ** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **TICAM2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **ZNF630** | Up | 3.5 | 0.3 | 7 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **EPHB1** | Up | 4.0 | 0.2 | 10 | 0 | Up | 3.2 | 0.0 | 16 | 1 |
| **LRRC70** | Up | 6.9 | 0.0 | 76 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **RUNX1T1** | Up | 5.8 | 0.0 | 34 | 0 | Up | 1.4 | 0.1 | 22 | 5 |
| **LOC100652732** | Up | 0.8 | 0.7 | 1 | 0 | Up | 6.3 | 0.0 | 13 | 0 |
| **ZNF772** | Up | 0.8 | 0.6 | 12 | 1 | Up | 6.3 | 0.0 | 13 | 0 |
| **ZNF568** | Up | 6.3 | 0.0 | 49 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **FZD4** | Up | 6.6 | 0.0 | 62 | 0 | Up | 0.5 | 0.3 | 59 | 26 |
| **CCDC112** | Up | 4.7 | 0.1 | 16 | 0 | Up | 2.4 | 0.0 | 18 | 2 |
| **FBXW7** | Up | 7.0 | 0.0 | 79 | 0 | Up | 0.1 | 0.9 | 21 | 12 |
| **VWA3A** | Up | 7.0 | 0.0 | 77 | 0 | Up | 0.1 | 0.9 | 14 | 8 |
| **LHX6** | Up | 1.4 | 0.4 | 18 | 1 | Up | 5.6 | 0.0 | 8 | 0 |
| **ZNF792** | Up | 4.5 | 0.1 | 14 | 0 | Up | 2.5 | 0.1 | 10 | 1 |
| **C13orf33** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **LOC100506075** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **PIWIL4** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **CENPI** | Up | 2.7 | 0.4 | 4 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **FLJ46010** | Up | 2.7 | 0.4 | 4 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **GJD4** | Up | 2.7 | 0.4 | 4 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **IL31RA** | Up | 2.7 | 0.4 | 4 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100507630** | Up | 2.7 | 0.4 | 4 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **N4BP3** | Up | 2.7 | 0.4 | 4 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100127910** | Up | 2.3 | 0.5 | 3 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC728342** | Up | 2.3 | 0.5 | 3 | 0 | Up | 4.7 | 0.2 | 4 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **NPFFR2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **C6orf62** | Up | 6.8 | 0.0 | 7848 | 11 | Up | 0.1 | 0.8 | 59 | 33 |
| **SSX3** | Up | 4.2 | 0.1 | 11 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ELFN2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 6.1 | 0.0 | 11 | 0 |
| **DIAPH3** | Up | 5.9 | 0.0 | 37 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **SDHAP1** | Up | 6.2 | 0.0 | 45 | 0 | Up | 0.7 | 0.4 | 21 | 8 |
| **NDST3** | Up | 4.5 | 0.1 | 14 | 0 | Up | 2.4 | 0.2 | 9 | 1 |
| **ZNF267** | Up | 4.5 | 0.1 | 14 | 0 | Up | 2.4 | 0.2 | 9 | 1 |
| **WNT4** | Up | 3.0 | 0.4 | 5 | 0 | Up | 3.8 | 0.0 | 25 | 1 |
| **TDRD5** | Up | 5.0 | 0.0 | 20 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **ANKRD50** | Up | 6.4 | 0.0 | 52 | 0 | Up | 0.4 | 0.6 | 20 | 9 |
| **SGCE** | Up | 6.0 | 0.0 | 41 | 0 | Up | 0.8 | 0.2 | 39 | 14 |
| **EZH2** | Up | 4.6 | 0.1 | 15 | 0 | Up | 2.2 | 0.0 | 23 | 3 |
| **DLGAP5** | Up | 1.0 | 0.1 | 75 | 6 | Up | 5.8 | 0.0 | 9 | 0 |
| **LOC100616668** | Up | 0.8 | 0.7 | 1 | 0 | Up | 6.0 | 0.0 | 10 | 0 |
| **C8orf37** | Up | 4.0 | 0.2 | 10 | 0 | Up | 2.8 | 0.1 | 12 | 1 |
| **ZNF304** | Up | 4.0 | 0.2 | 10 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **TMTC4** | Up | 4.5 | 0.1 | 14 | 0 | Up | 2.2 | 0.0 | 39 | 5 |
| **SLC35A5** | Up | 6.4 | 0.0 | 54 | 0 | Up | 0.3 | 0.7 | 28 | 14 |
| **LOC100131655** | Up | 3.0 | 0.4 | 5 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC100287497** | Up | 3.0 | 0.4 | 5 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **SLC52A1** | Up | 3.0 | 0.4 | 5 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **XKR6** | Up | 3.0 | 0.4 | 5 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **KRBA2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LINC00483** | Up | 1.8 | 0.6 | 2 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **VRK2** | Up | 5.3 | 0.0 | 24 | 0 | Up | 1.4 | 0.2 | 18 | 4 |
| **MYZAP** | Up | 3.7 | 0.2 | 8 | 0 | Up | 3.0 | 0.0 | 14 | 1 |
| **FAT4** | Up | 5.1 | 0.0 | 21 | 0 | Up | 1.6 | 0.2 | 15 | 3 |
| **NRCAM** | Up | 5.7 | 0.0 | 33 | 0 | Up | 0.9 | 0.2 | 34 | 11 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SLC6A4** | Up | 4.9 | 0.1 | 18 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **SHISA2** | Up | 5.2 | 0.0 | 22 | 0 | Up | 1.5 | 0.2 | 14 | 3 |
| **C11orf91** | Up | 3.9 | 0.2 | 9 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **C7orf57** | Up | 3.9 | 0.2 | 9 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **CSMD3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.8 | 0.0 | 9 | 0 |
| **TTC17** | Up | 5.7 | 0.0 | 33 | 0 | Up | 0.9 | 0.1 | 63 | 21 |
| **TTC13** | Up | 2.7 | 0.4 | 4 | 0 | Up | 3.9 | 0.0 | 26 | 1 |
| **MRPS17** | Up | 5.4 | 0.0 | 26 | 0 | Up | 1.2 | 0.3 | 15 | 4 |
| **KRT42P** | Up | 2.3 | 0.5 | 3 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100129055** | Up | 2.3 | 0.5 | 3 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100507054** | Up | 2.3 | 0.5 | 3 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100652747** | Up | 2.3 | 0.5 | 3 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **ZNF836** | Up | 2.3 | 0.5 | 3 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **MEX3D** | Up | 5.3 | 0.0 | 24 | 0 | Up | 1.3 | 0.2 | 20 | 5 |
| **MUS81** | Up | 4.4 | 0.1 | 13 | 0 | Up | 2.2 | 0.0 | 44 | 6 |
| **PLGRKT** | Up | 5.5 | 0.0 | 28 | 0 | Up | 1.0 | 0.3 | 20 | 6 |
| **RMI1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 3.0 | 0.0 | 27 | 2 |
| **LOC152578** | Up | 3.7 | 0.2 | 8 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **SAR1A** | Up | 5.9 | 0.0 | 1909 | 5 | Up | 0.6 | 0.3 | 62 | 26 |
| **MOGAT3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.6 | 0.0 | 8 | 0 |
| **TCF15** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.6 | 0.0 | 8 | 0 |
| **HMMR** | Up | 4.9 | 0.1 | 18 | 0 | Up | 1.6 | 0.1 | 20 | 4 |
| **FOXP1** | Up | 6.2 | 0.0 | 1938 | 4 | Up | 0.2 | 0.7 | 74 | 40 |
| **LOC100510017** | Up | 2.7 | 0.4 | 4 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC219731** | Up | 2.7 | 0.4 | 4 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **KBTBD6** | Up | 5.6 | 0.0 | 31 | 0 | Up | 0.8 | 0.3 | 28 | 10 |
| **CDSN** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **HYAL4** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100507241** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.7 | 0.2 | 4 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC100653064** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **MYCL1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **PLA2G10** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100507507** | Up | 4.7 | 0.1 | 16 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **NOVA1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 4.1 | 0.0 | 30 | 1 |
| **NLRP1** | Up | 4.4 | 0.1 | 13 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **CCDC23** | Up | 5.0 | 0.0 | 20 | 0 | Up | 1.4 | 0.2 | 17 | 4 |
| **ZNF417** | Up | 4.0 | 0.2 | 10 | 0 | Up | 2.4 | 0.2 | 9 | 1 |
| **ADAM19** | Up | 4.2 | 0.0 | 123 | 1 | Up | 2.2 | 0.0 | 23 | 3 |
| **GIMAP8** | Up | 5.9 | 0.0 | 36 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **GADL1** | Up | 2.1 | 0.1 | 29 | 1 | Up | 4.3 | 0.2 | 3 | 0 |
| **INTS7** | Up | 4.8 | 0.1 | 17 | 0 | Up | 1.6 | 0.3 | 10 | 2 |
| **KIAA1614** | Up | 4.2 | 0.1 | 11 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **PTPN9** | Up | 4.9 | 0.1 | 18 | 0 | Up | 1.5 | 0.0 | 50 | 11 |
| **EPB41L2** | Up | 4.9 | 0.1 | 18 | 0 | Up | 1.5 | 0.0 | 81 | 18 |
| **FOXO1** | Up | 5.5 | 0.0 | 29 | 0 | Up | 0.8 | 0.1 | 67 | 24 |
| **ZNF167** | Up | 4.3 | 0.1 | 12 | 0 | Up | 2.0 | 0.1 | 20 | 3 |
| **CBY3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **KLRC2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **LAMB2P1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **LOC100506827** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **LOC100507395** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **SIX3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.5 | 0.1 | 7 | 0 |
| **CENPQ** | Up | 3.5 | 0.3 | 7 | 0 | Up | 2.8 | 0.1 | 12 | 1 |
| **HRH1** | Up | 5.2 | 0.0 | 23 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **LOC100268168** | Up | 5.3 | 0.0 | 268 | 1 | Up | 1.0 | 0.4 | 13 | 4 |
| **THAP5** | Up | 6.2 | 0.0 | 504 | 1 | Up | 0.1 | 1.0 | 22 | 13 |
| **MAPKAPK5** | Up | 4.8 | 0.1 | 17 | 0 | Up | 1.4 | 0.0 | 40 | 9 |
| **FLJ27243** | Up | 5.8 | 0.0 | 34 | 0 | Up | 0.5 | 0.7 | 9 | 4 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MIR100HG** | Up | 5.7 | 0.0 | 33 | 0 | Up | 0.5 | 0.6 | 16 | 7 |
| **FAM41C** | Up | 3.0 | 0.0 | 101 | 2 | Up | 3.3 | 0.0 | 17 | 1 |
| **FBXL3** | Up | 5.8 | 0.0 | 35 | 0 | Up | 0.4 | 0.5 | 41 | 19 |
| **ZNF430** | Up | 4.9 | 0.1 | 19 | 0 | Up | 1.3 | 0.3 | 12 | 3 |
| **DAPK1** | Up | 4.3 | 0.1 | 12 | 0 | Up | 1.9 | 0.0 | 31 | 5 |
| **RIPK3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.9 | 0.0 | 26 | 1 |
| **PLXNA4** | Up | 4.2 | 0.1 | 11 | 0 | Up | 2.0 | 0.0 | 27 | 4 |
| **ZC3H14** | Up | 5.6 | 0.0 | 31 | 0 | Up | 0.5 | 0.3 | 54 | 23 |
| **ZNF30** | Up | 0.9 | 0.4 | 25 | 2 | Up | 5.2 | 0.1 | 6 | 0 |
| **PLCD4** | Up | 3.3 | 0.3 | 6 | 0 | Up | 2.9 | 0.1 | 13 | 1 |
| **UBA6** | Up | 5.4 | 0.0 | 283 | 1 | Up | 0.8 | 0.3 | 31 | 11 |
| **LOC283683** | Up | 4.8 | 0.1 | 17 | 0 | Up | 1.4 | 0.2 | 17 | 4 |
| **NALCN** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.8 | 0.0 | 25 | 1 |
| **NHSL1** | Up | 5.8 | 0.0 | 1096 | 3 | Up | 0.3 | 0.6 | 38 | 19 |
| **ZNF654** | Up | 6.0 | 0.0 | 40 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **SELE** | Up | 6.1 | 0.0 | 42 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LOC283143** | Up | 3.9 | 0.2 | 9 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **LOC100507049** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **SAP25** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.2 | 0.1 | 6 | 0 |
| **CCDC144NL** | Up | 3.3 | 0.3 | 6 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **H3F3C** | Up | 3.3 | 0.3 | 6 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **PRR23A** | Up | 3.3 | 0.3 | 6 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **STEAP1B** | Up | 3.3 | 0.3 | 6 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **CCNE1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 3.3 | 0.0 | 34 | 2 |
| **ZNF610** | Up | 4.0 | 0.2 | 10 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **C11orf45** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **DCAF4L1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LINC00221** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC100288181** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.7 | 0.3 | 2 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC100507242** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC100507624** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC286094** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **SPINK7** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **ZNF625** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **FAM71E1** | Up | 4.8 | 0.1 | 17 | 0 | Up | 1.2 | 0.2 | 23 | 6 |
| **CLEC4C** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100505940** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100506642** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100507360** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100630923** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC647946** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **OIP5** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **PBOV1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **SPDYE8P** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **ZNF563** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC339803** | Up | 3.6 | 0.0 | 84 | 1 | Up | 2.4 | 0.0 | 26 | 3 |
| **PTRHD1** | Up | 4.5 | 0.1 | 14 | 0 | Up | 1.5 | 0.2 | 14 | 3 |
| **TNRC6C** | Up | 4.9 | 0.1 | 19 | 0 | Up | 1.0 | 0.1 | 37 | 11 |
| **CSF2RA** | Up | 4.2 | 0.1 | 11 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **SLC30A6** | Up | 5.9 | 0.0 | 36 | 0 | Up | 0.1 | 0.9 | 26 | 15 |
| **TBX5** | Up | 4.2 | 0.0 | 127 | 1 | Up | 1.7 | 0.1 | 22 | 4 |
| **LOC286190** | Up | 4.2 | 0.1 | 11 | 0 | Up | 1.8 | 0.1 | 17 | 3 |
| **IQGAP3** | Up | 3.0 | 0.4 | 5 | 0 | Up | 2.9 | 0.1 | 13 | 1 |
| **ZNF492** | Up | 4.9 | 0.1 | 18 | 0 | Up | 1.0 | 0.3 | 17 | 5 |
| **C2orf83** | Up | 0.9 | 0.6 | 13 | 1 | Up | 5.0 | 0.1 | 5 | 0 |
| **SUSD1** | Up | 5.5 | 0.0 | 28 | 0 | Up | 0.4 | 0.7 | 13 | 6 |
| **FNIP1** | Up | 5.4 | 0.0 | 567 | 2 | Up | 0.4 | 0.5 | 31 | 14 |
| **EFNA5** | Up | 5.1 | 0.0 | 678 | 3 | Up | 0.8 | 0.4 | 22 | 8 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RHBDL2** | Up | 5.0 | 0.0 | 20 | 0 | Up | 0.9 | 0.4 | 15 | 5 |
| **CHD7** | Up | 5.4 | 0.0 | 26 | 0 | Up | 0.5 | 0.5 | 32 | 14 |
| **FAM24B** | Up | 3.5 | 0.3 | 7 | 0 | Up | 2.4 | 0.2 | 9 | 1 |
| **LOC100505528** | Up | 3.5 | 0.3 | 7 | 0 | Up | 2.4 | 0.2 | 9 | 1 |
| **LOC100507334** | Up | 3.5 | 0.3 | 7 | 0 | Up | 2.4 | 0.2 | 9 | 1 |
| **THAP2** | Up | 4.2 | 0.1 | 11 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **CEP112** | Up | 5.2 | 0.0 | 22 | 0 | Up | 0.7 | 0.5 | 16 | 6 |
| **LOC100652765** | Up | 3.5 | 0.0 | 151 | 2 | Up | 2.3 | 0.0 | 82 | 10 |
| **LOC649395** | Up | 5.0 | 0.0 | 20 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **RPA3** | Up | 5.4 | 0.0 | 26 | 0 | Up | 0.5 | 0.6 | 18 | 8 |
| **ZNF585A** | Up | 5.4 | 0.0 | 27 | 0 | Up | 0.4 | 0.7 | 13 | 6 |
| **RPSAP9** | Up | 4.3 | 0.1 | 12 | 0 | Up | 1.6 | 0.3 | 10 | 2 |
| **SYTL4** | Up | 5.3 | 0.0 | 24 | 0 | Up | 0.6 | 0.5 | 17 | 7 |
| **ZNF662** | Up | 5.3 | 0.0 | 24 | 0 | Up | 0.6 | 0.4 | 34 | 14 |
| **IL33** | Up | 5.8 | 0.0 | 34 | 0 | Up | 0.1 | 1.0 | 17 | 10 |
| **PDGFA** | Up | 5.8 | 0.0 | 386 | 1 | Up | 0.0 | 1.0 | 18 | 11 |
| **RBM43** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.9 | 0.3 | 19 | 6 |
| **ZFP161** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.9 | 0.3 | 25 | 8 |
| **C10orf46** | Up | 5.2 | 0.0 | 1144 | 5 | Up | 0.6 | 0.1 | 90 | 36 |
| **CHRND** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **CYLC2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **FAM163A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **KCNH7** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC100289026** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC100505481** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC100506238** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC100652961** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC100652993** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **LOC730184** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LY6G5B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **PCDH15** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **SUMO4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **ZNF469** | Up | 0.8 | 0.7 | 1 | 0 | Up | 5.0 | 0.1 | 5 | 0 |
| **C5orf64** | Up | 3.0 | 0.4 | 5 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **C9orf139** | Up | 3.0 | 0.4 | 5 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **RPA4** | Up | 3.0 | 0.4 | 5 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ZFP37** | Up | 3.0 | 0.4 | 5 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **GBP6** | Up | 4.0 | 0.2 | 10 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **ITGA10** | Up | 4.9 | 0.1 | 19 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **SLC25A43** | Up | 4.9 | 0.1 | 19 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **AOX2P** | Up | 5.5 | 0.0 | 29 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **CCNT2** | Up | 4.9 | 0.1 | 19 | 0 | Up | 0.8 | 0.3 | 29 | 10 |
| **PVRL3** | Up | 5.7 | 0.0 | 33 | 0 | Up | 0.0 | 1.0 | 15 | 9 |
| **HIST1H4C** | Up | 3.8 | 0.0 | 178 | 2 | Up | 2.0 | 0.3 | 7 | 1 |
| **BLOC1S3** | Up | 4.2 | 0.0 | 237 | 2 | Up | 1.6 | 0.2 | 15 | 3 |
| **POP5** | Up | 5.5 | 0.0 | 29 | 0 | Up | 0.2 | 0.8 | 19 | 10 |
| **MRPL22** | Up | 4.5 | 0.0 | 152 | 1 | Up | 1.3 | 0.1 | 28 | 7 |
| **KLLN** | Up | 5.5 | 0.0 | 28 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **LOC100652822** | Up | 5.2 | 0.0 | 23 | 0 | Up | 0.5 | 0.5 | 19 | 8 |
| **PDXDC2P** | Up | 5.7 | 0.0 | 356 | 1 | Up | 0.0 | 0.9 | 42 | 25 |
| **ZNRD1** | Up | 3.9 | 0.2 | 9 | 0 | Up | 1.9 | 0.0 | 30 | 5 |
| **C2CD4B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 4.0 | 0.0 | 54 | 2 |
| **LOC100507460** | Up | 4.7 | 0.0 | 174 | 1 | Up | 1.1 | 0.5 | 7 | 2 |
| **HSCB** | Up | 5.3 | 0.0 | 25 | 0 | Up | 0.4 | 0.7 | 15 | 7 |
| **C14orf43** | Up | 4.5 | 0.0 | 701 | 5 | Up | 1.2 | 0.1 | 35 | 9 |
| **ANKRD55** | Up | 3.7 | 0.2 | 8 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **PRRT3** | Up | 4.7 | 0.1 | 16 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **IFT43** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.8 | 0.2 | 32 | 11 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CYP21A1P** | Up | 1.0 | 0.5 | 14 | 1 | Up | 4.7 | 0.2 | 4 | 0 |
| **FRAT2** | Up | 3.3 | 0.3 | 6 | 0 | Up | 2.4 | 0.0 | 18 | 2 |
| **SSH2** | Up | 4.6 | 0.1 | 15 | 0 | Up | 1.1 | 0.2 | 28 | 8 |
| **WDR89** | Up | 4.6 | 0.1 | 15 | 0 | Up | 1.1 | 0.3 | 14 | 4 |
| **LOC100506036** | Up | 4.2 | 0.1 | 11 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **ZNF276** | Up | 4.6 | 0.1 | 15 | 0 | Up | 1.1 | 0.2 | 24 | 7 |
| **TTK** | Up | 0.7 | 0.7 | 11 | 1 | Up | 5.0 | 0.1 | 5 | 0 |
| **ONECUT2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.9 | 0.0 | 26 | 2 |
| **MLKL** | Up | 0.4 | 0.8 | 9 | 1 | Up | 5.2 | 0.1 | 6 | 0 |
| **ANKRD40** | Up | 5.3 | 0.0 | 998 | 4 | Up | 0.4 | 0.7 | 25 | 12 |
| **ATPBD4** | Up | 4.2 | 0.1 | 11 | 0 | Up | 1.5 | 0.2 | 14 | 3 |
| **TEP1** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.8 | 0.3 | 28 | 10 |
| **NANP** | Up | 4.4 | 0.1 | 13 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **STIL** | Up | 4.8 | 0.1 | 17 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **MGST2** | Up | 3.8 | 0.0 | 93 | 1 | Up | 1.9 | 0.0 | 36 | 6 |
| **LOC642361** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.9 | 0.0 | 26 | 1 |
| **LINC00476** | Up | 5.1 | 0.0 | 21 | 0 | Up | 0.5 | 0.4 | 40 | 17 |
| **NFATC2** | Up | 5.1 | 0.0 | 230 | 1 | Up | 0.5 | 0.5 | 19 | 8 |
| **NPAS3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.3 | 0.0 | 33 | 2 |
| **CHRNA5** | Up | 4.4 | 0.1 | 13 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **FAM5B** | Up | 4.4 | 0.1 | 13 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **DISC2** | Up | 4.8 | 0.1 | 17 | 0 | Up | 0.8 | 0.3 | 23 | 8 |
| **EIF2S3** | Up | 5.0 | 0.0 | 2433 | 12 | Up | 0.6 | 0.3 | 56 | 23 |
| **LOC100506710** | Up | 5.3 | 0.0 | 25 | 0 | Up | 0.3 | 0.7 | 35 | 18 |
| **LOC100506675** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.3 | 0.0 | 17 | 1 |
| **AP5S1** | Up | 4.3 | 0.0 | 260 | 2 | Up | 1.3 | 0.3 | 12 | 3 |
| **NBPF3** | Up | 4.4 | 0.1 | 13 | 0 | Up | 1.2 | 0.3 | 15 | 4 |
| **KIAA1841** | Up | 5.2 | 0.0 | 22 | 0 | Up | 0.4 | 0.7 | 13 | 6 |
| **RBX1** | Up | 4.1 | 0.0 | 227 | 2 | Up | 1.4 | 0.0 | 44 | 10 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **THRAP3** | Up | 5.5 | 0.0 | 1166 | 4 | Up | 0.0 | 1.0 | 68 | 41 |
| **CCRN4L** | Up | 2.8 | 0.0 | 47 | 1 | Up | 2.8 | 0.5 | 1 | 0 |
| **CYTL1** | Up | 4.7 | 0.1 | 16 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100506994** | Up | 4.7 | 0.1 | 16 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LMO2** | Up | 5.1 | 0.0 | 21 | 0 | Up | 0.5 | 0.5 | 38 | 17 |
| **LOC646576** | Up | 5.3 | 0.0 | 24 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **PEAR1** | Up | 5.2 | 0.0 | 259 | 1 | Up | 0.3 | 0.8 | 10 | 5 |
| **PRTG** | Up | 3.5 | 0.3 | 7 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **ZC3H4** | Up | 5.2 | 0.0 | 23 | 0 | Up | 0.3 | 0.8 | 12 | 6 |
| **ANKRD20A2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **DCLRE1B** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.8 | 0.1 | 12 | 1 |
| **GSTTP1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100652964** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LUST** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **NOS1** | Up | 4.6 | 0.1 | 15 | 0 | Up | 0.9 | 0.1 | 45 | 15 |
| **C21orf37** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **DLX6** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **FLJ32063** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **FLJ41757** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **GHRLOS** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **HESX1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LINC00558** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100131496** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100233156** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100292409** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100506241** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100507552** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100509621** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC100653042** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC282980** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **LOC285084** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **MED12L** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **MIR1267** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **NR2E3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **PGAM4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **POM121L9P** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **RNU6-1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **SLC35G1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **SSPO** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.7 | 0.2 | 4 | 0 |
| **MTRF1** | Up | 4.4 | 0.1 | 13 | 0 | Up | 1.1 | 0.3 | 14 | 4 |
| **GOLGA6L9** | Up | 3.5 | 0.3 | 7 | 0 | Up | 2.0 | 0.0 | 32 | 5 |
| **BAG4** | Up | 4.3 | 0.0 | 385 | 3 | Up | 1.1 | 0.4 | 11 | 3 |
| **VAT1L** | Up | 4.8 | 0.1 | 17 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **PTPN21** | Up | 4.5 | 0.1 | 14 | 0 | Up | 1.0 | 0.1 | 38 | 12 |
| **DISP1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.9 | 0.1 | 13 | 2 |
| **PLXND1** | Up | 4.2 | 0.1 | 11 | 0 | Up | 1.3 | 0.0 | 48 | 12 |
| **VASH1** | Up | 4.8 | 0.1 | 17 | 0 | Up | 0.7 | 0.2 | 49 | 19 |
| **TMEM179B** | Up | 4.5 | 0.1 | 14 | 0 | Up | 0.9 | 0.1 | 44 | 14 |
| **ZNF551** | Up | 4.6 | 0.1 | 15 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **CASS4** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC100507558** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC100509323** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC653786** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **SLC2A14** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **TMPRSS11D** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **TPI1P2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **FAM26E** | Up | 3.9 | 0.2 | 9 | 0 | Up | 1.6 | 0.3 | 10 | 2 |
| **FAM76A** | Up | 5.0 | 0.0 | 212 | 1 | Up | 0.5 | 0.6 | 16 | 7 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SNRNP35** | Up | 5.3 | 0.0 | 25 | 0 | Up | 0.1 | 0.9 | 14 | 8 |
| **FAM69B** | Up | 3.3 | 0.3 | 6 | 0 | Up | 2.1 | 0.0 | 79 | 11 |
| **LOC100506543** | Up | 3.3 | 0.3 | 6 | 0 | Up | 2.1 | 0.0 | 22 | 3 |
| **SEMA3D** | Up | 2.7 | 0.0 | 43 | 1 | Up | 2.8 | 0.5 | 1 | 0 |
| **FAM123C** | Up | 5.0 | 0.0 | 20 | 0 | Up | 0.4 | 0.7 | 13 | 6 |
| **SH3GL3** | Up | 5.2 | 0.0 | 2703 | 12 | Up | 0.3 | 0.5 | 118 | 61 |
| **CDCA7** | Up | 2.3 | 0.5 | 3 | 0 | Up | 3.1 | 0.0 | 43 | 3 |
| **ADCY8** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **ZUFSP** | Up | 4.0 | 0.2 | 10 | 0 | Up | 1.4 | 0.3 | 13 | 3 |
| **PUS3** | Up | 4.6 | 0.1 | 15 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **CNIH4** | Up | 4.0 | 0.0 | 394 | 4 | Up | 1.4 | 0.1 | 31 | 7 |
| **HEY1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.9 | 0.0 | 36 | 6 |
| **KIAA0825** | Up | 4.8 | 0.1 | 17 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **SLC46A3** | Up | 3.3 | 0.3 | 6 | 0 | Up | 2.1 | 0.0 | 62 | 9 |
| **COL15A1** | Up | 4.2 | 0.1 | 11 | 0 | Up | 1.2 | 0.2 | 19 | 5 |
| **LOC100507131** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.5 | 0.6 | 16 | 7 |
| **LOC100506906** | Up | 5.0 | 0.0 | 980 | 5 | Up | 0.4 | 0.6 | 30 | 14 |
| **TBP** | Up | 5.2 | 0.0 | 23 | 0 | Up | 0.1 | 0.9 | 25 | 14 |
| **LOC100507094** | Up | 5.3 | 0.0 | 24 | 0 | Up | 0.1 | 1.0 | 12 | 7 |
| **LRRC37A** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **LOC100506748** | Up | 5.2 | 0.0 | 22 | 0 | Up | 0.2 | 0.9 | 13 | 7 |
| **SLC35D2** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.5 | 0.6 | 18 | 8 |
| **NEK1** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.6 | 0.0 | 50 | 10 |
| **SKIL** | Up | 5.2 | 0.0 | 1193 | 5 | Up | 0.1 | 0.9 | 41 | 24 |
| **LOC100653060** | Up | 4.6 | 0.1 | 15 | 0 | Up | 0.7 | 0.5 | 16 | 6 |
| **PDCD1LG2** | Up | 4.5 | 0.1 | 14 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **C18orf26** | Up | 4.7 | 0.1 | 16 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **ZNF766** | Up | 4.7 | 0.1 | 16 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **VSIG10** | Up | 4.9 | 0.0 | 588 | 3 | Up | 0.4 | 0.7 | 21 | 10 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ANKRD26** | Up | 5.3 | 0.0 | 24 | 0 | Up | 0.0 | 1.0 | 10 | 6 |
| **KIAA1524** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **SPPL3** | Up | 5.1 | 0.0 | 21 | 0 | Up | 0.2 | 0.7 | 52 | 28 |
| **ZNF578** | Up | 2.9 | 0.0 | 97 | 2 | Up | 2.4 | 0.0 | 26 | 3 |
| **HPSE** | Up | 4.6 | 0.1 | 15 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **UQCRQ** | Up | 4.4 | 0.0 | 270 | 2 | Up | 0.9 | 0.1 | 69 | 23 |
| **ZNF226** | Up | 4.2 | 0.1 | 11 | 0 | Up | 1.1 | 0.2 | 21 | 6 |
| **FILIP1** | Up | 5.2 | 0.0 | 22 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **SNX16** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **IPO11** | Up | 3.2 | 0.0 | 176 | 3 | Up | 2.0 | 0.1 | 14 | 2 |
| **TMSB15B** | Up | 4.9 | 0.1 | 19 | 0 | Up | 0.3 | 0.8 | 12 | 6 |
| **ENPP6** | Up | 4.7 | 0.1 | 16 | 0 | Up | 0.5 | 0.5 | 26 | 11 |
| **TNFRSF25** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.9 | 0.0 | 25 | 4 |
| **PXDC1** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.3 | 0.6 | 31 | 15 |
| **JMY** | Up | 5.2 | 0.0 | 22 | 0 | Up | 0.0 | 1.0 | 15 | 9 |
| **CBX2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.9 | 0.1 | 13 | 1 |
| **TBX1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.9 | 0.1 | 13 | 1 |
| **LOC285456** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **DIRAS3** | Up | 3.0 | 0.4 | 5 | 0 | Up | 2.1 | 0.1 | 15 | 2 |
| **SGOL2** | Up | 5.1 | 0.0 | 21 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **PAX6** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.4 | 0.0 | 19 | 1 |
| **LOC100129502** | Up | 4.2 | 0.1 | 11 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **UBR1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.6 | 0.0 | 36 | 7 |
| **MYO1D** | Up | 4.0 | 0.2 | 10 | 0 | Up | 1.1 | 0.0 | 57 | 16 |
| **HSPE1** | Up | 4.2 | 0.0 | 237 | 2 | Up | 1.0 | 0.0 | 76 | 24 |
| **ZNF175** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **HSPB11** | Up | 3.5 | 0.0 | 76 | 1 | Up | 1.7 | 0.1 | 21 | 4 |
| **UCKL1-AS1** | Up | 3.9 | 0.2 | 9 | 0 | Up | 1.3 | 0.3 | 12 | 3 |
| **PDC** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.3 | 0.9 | 4 | 2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **C5orf54** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **ZNF75A** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **LOC100507117** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.4 | 0.1 | 22 | 5 |
| **FAM96B** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.7 | 0.3 | 35 | 13 |
| **NOSTRIN** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.2 | 0.8 | 25 | 13 |
| **RAB21** | Up | 4.9 | 0.0 | 205 | 1 | Up | 0.2 | 0.8 | 30 | 16 |
| **TDRD7** | Up | 4.0 | 0.2 | 10 | 0 | Up | 1.1 | 0.3 | 14 | 4 |
| **EFCAB7** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.6 | 0.2 | 15 | 3 |
| **MYCBP** | Up | 3.9 | 0.2 | 9 | 0 | Up | 1.2 | 0.0 | 42 | 11 |
| **ARNTL2** | Up | 4.7 | 0.0 | 341 | 2 | Up | 0.4 | 0.7 | 15 | 7 |
| **NUP54** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.8 | 0.4 | 20 | 7 |
| **DPY19L1** | Up | 4.9 | 0.1 | 18 | 0 | Up | 0.2 | 0.7 | 36 | 19 |
| **AKR7A2P1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **DNAH3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LINC00471** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100507133** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC158434** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC285972** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **PPEF2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **RLN2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **TBX19** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.1 | 12 | 1 |
| **ZSCAN4** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100507567** | Up | 3.9 | 0.2 | 9 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **PAPD4** | Up | 4.7 | 0.1 | 16 | 0 | Up | 0.4 | 0.7 | 17 | 8 |
| **THBD** | Up | 4.8 | 0.1 | 17 | 0 | Up | 0.3 | 0.7 | 32 | 16 |
| **BCRP2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **C1QTNF9B-AS1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **C3orf27** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **CXorf22** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DSERG1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **FER1L5** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **H2BFXP** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100129858** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100506540** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **LOC100507127** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **MAB21L1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **PAX1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **RAET1G** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **REXO1L1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **TMPRSS11BNL** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **VWA2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.3 | 0.2 | 3 | 0 |
| **MINA** | Up | 4.9 | 0.1 | 19 | 0 | Up | 0.1 | 0.9 | 23 | 13 |
| **C3orf24** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **LOC100652845** | Up | 4.6 | 0.1 | 15 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **LOC645202** | Up | 4.6 | 0.1 | 15 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **MARCH3** | Up | 1.7 | 0.2 | 22 | 1 | Up | 3.3 | 0.0 | 18 | 1 |
| **LOC400891** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.9 | 0.3 | 27 | 9 |
| **RFPL3-AS1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **CCL22** | Up | 4.5 | 0.1 | 14 | 0 | Up | 0.5 | 0.5 | 21 | 9 |
| **SACS** | Up | 2.5 | 0.0 | 39 | 1 | Up | 2.5 | 0.0 | 19 | 2 |
| **ARHGEF15** | Up | 4.5 | 0.1 | 14 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **SPIRE1** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.6 | 0.2 | 57 | 23 |
| **NDUFB3** | Up | 4.6 | 0.0 | 167 | 1 | Up | 0.4 | 0.5 | 42 | 20 |
| **MRPL36** | Up | 3.2 | 0.0 | 61 | 1 | Up | 1.8 | 0.0 | 40 | 7 |
| **LOC100507178** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **COL13A1** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **FKBP9L** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **LOC100507161** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.2 | 0.4 | 8 | 2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **APOL2** | Up | 3.7 | 0.0 | 336 | 4 | Up | 1.2 | 0.2 | 23 | 6 |
| **MARVELD2** | Up | 4.1 | 0.0 | 335 | 3 | Up | 0.8 | 0.3 | 29 | 10 |
| **PCMTD2** | Up | 4.1 | 0.0 | 114 | 1 | Up | 0.9 | 0.1 | 45 | 15 |
| **RAX2** | Up | 0.7 | 0.7 | 11 | 1 | Up | 4.3 | 0.2 | 3 | 0 |
| **PHF8** | Up | 4.7 | 0.1 | 16 | 0 | Up | 0.2 | 0.8 | 25 | 13 |
| **LOC100288997** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **LOC100507904** | Up | 4.5 | 0.1 | 14 | 0 | Up | 0.4 | 0.7 | 11 | 5 |
| **NUSAP1** | Up | 1.8 | 0.0 | 173 | 8 | Up | 3.1 | 0.0 | 30 | 2 |
| **SCN3A** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.2 | 0.0 | 16 | 1 |
| **LOC100507367** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **PPP4R1L** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **LOC100507149** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **THEM4** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.8 | 0.2 | 44 | 16 |
| **R3HDM2** | Up | 4.7 | 0.0 | 175 | 1 | Up | 0.2 | 0.7 | 44 | 23 |
| **UBAC1** | Up | 4.7 | 0.1 | 16 | 0 | Up | 0.2 | 0.8 | 30 | 16 |
| **ZNF571** | Up | 0.2 | 0.9 | 8 | 1 | Up | 4.7 | 0.2 | 4 | 0 |
| **MYL12A** | Up | 3.5 | 0.0 | 1645 | 23 | Up | 1.4 | 0.0 | 275 | 65 |
| **C6orf70** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **SPDYE5** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.6 | 0.0 | 20 | 2 |
| **TMEM119** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.4 | 0.2 | 17 | 4 |
| **ZNF23** | Up | 3.9 | 0.2 | 9 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **LOC100127885** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **SENP5** | Up | 3.5 | 0.0 | 630 | 9 | Up | 1.4 | 0.0 | 77 | 18 |
| **RELN** | Up | 3.4 | 0.0 | 73 | 1 | Up | 1.4 | 0.2 | 18 | 4 |
| **RAD54L2** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **NEUROD2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.0 | 0.0 | 29 | 1 |
| **PATZ1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.1 | 0.0 | 57 | 8 |
| **HBXIP** | Up | 4.5 | 0.0 | 305 | 2 | Up | 0.3 | 0.6 | 54 | 27 |
| **ZNF333** | Up | 4.8 | 0.1 | 17 | 0 | Up | 0.1 | 1.0 | 22 | 13 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC344887** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.1 | 0.0 | 15 | 1 |
| **KIAA2022** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.5 | 0.1 | 10 | 1 |
| **MARVELD3** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **LOC100507212** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **PRIM2** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **SLC44A5** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **WDFY2** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **CNGB1** | Up | 4.6 | 0.1 | 15 | 0 | Up | 0.2 | 0.9 | 15 | 8 |
| **LOC100505783** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.3 | 0.2 | 20 | 5 |
| **UPK3BL** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.6 | 0.4 | 23 | 9 |
| **AMZ2P1** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.5 | 0.5 | 21 | 9 |
| **CSTF2T** | Up | 4.5 | 0.1 | 14 | 0 | Up | 0.3 | 0.7 | 24 | 12 |
| **MMP15** | Up | 0.8 | 0.7 | 1 | 0 | Up | 4.0 | 0.0 | 28 | 1 |
| **FAM221A** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.3 | 0.2 | 16 | 4 |
| **CAMK2B** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.8 | 0.1 | 61 | 22 |
| **FNTB** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.4 | 0.6 | 32 | 15 |
| **FAM208A** | Up | 4.5 | 0.0 | 156 | 1 | Up | 0.3 | 0.7 | 39 | 20 |
| **PDGFB** | Up | 2.4 | 0.0 | 37 | 1 | Up | 2.3 | 0.0 | 25 | 3 |
| **STAC** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **ZNF436** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **ENG** | Up | 3.6 | 0.0 | 162 | 2 | Up | 1.1 | 0.0 | 88 | 25 |
| **SERF1B** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.9 | 0.4 | 18 | 6 |
| **C5orf56** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.9 | 0.0 | 27 | 1 |
| **CXorf23** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **DAND5** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **CNOT6L** | Up | 4.2 | 0.0 | 364 | 3 | Up | 0.5 | 0.5 | 23 | 10 |
| **LOC284865** | Up | 4.5 | 0.1 | 14 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **NEUROG2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 3.0 | 0.0 | 14 | 1 |
| **LOC100506100** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.7 | 0.2 | 11 | 2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SEC61G** | Up | 4.3 | 0.0 | 132 | 1 | Up | 0.5 | 0.5 | 36 | 16 |
| **FAM174B** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.4 | 0.1 | 31 | 7 |
| **PIEZO2** | Up | 3.9 | 0.0 | 99 | 1 | Up | 0.9 | 0.3 | 27 | 9 |
| **CCDC85A** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **JHDM1D** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.7 | 0.4 | 24 | 9 |
| **ACVR1B** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.3 | 0.6 | 37 | 18 |
| **EFEMP1** | Up | 4.5 | 0.0 | 1795 | 13 | Up | 0.3 | 0.6 | 72 | 37 |
| **ATG9B** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.4 | 0.0 | 18 | 2 |
| **CCDC122** | Up | 2.7 | 0.4 | 4 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **ZNF225** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **CSF2RB** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100506856** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100506730** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **MIR17HG** | Up | 3.7 | 0.2 | 8 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **MTERFD1** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.4 | 0.7 | 11 | 5 |
| **SLC36A4** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.7 | 0.1 | 16 | 3 |
| **TULP3** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.7 | 0.4 | 21 | 8 |
| **AVIL** | Up | 4.1 | 0.0 | 121 | 1 | Up | 0.6 | 0.3 | 41 | 17 |
| **TCF4** | Up | 4.3 | 0.0 | 509 | 4 | Up | 0.4 | 0.3 | 96 | 46 |
| **NUMBL** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **FAM13B** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.3 | 0.7 | 30 | 15 |
| **ZNF350** | Up | 4.5 | 0.1 | 14 | 0 | Up | 0.2 | 0.9 | 13 | 7 |
| **LOC654342** | Up | 1.8 | 0.2 | 24 | 1 | Up | 2.9 | 0.1 | 13 | 1 |
| **C10orf140** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.3 | 0.8 | 8 | 4 |
| **LOC90784** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.3 | 0.8 | 10 | 5 |
| **EMILIN3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.4 | 0.2 | 9 | 1 |
| **LOC100505865** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.4 | 0.2 | 9 | 1 |
| **PLAG1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.9 | 0.1 | 13 | 2 |
| **ZNF114** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.8 | 0.7 | 3 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **KIAA1751** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **RCBTB1** | Up | 4.6 | 0.1 | 15 | 0 | Up | 0.1 | 1.0 | 17 | 10 |
| **TRIM41** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.9 | 0.1 | 19 | 3 |
| **C22orf29** | Up | 3.0 | 0.0 | 262 | 5 | Up | 1.6 | 0.0 | 35 | 7 |
| **ST3GAL5** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.8 | 0.3 | 25 | 9 |
| **MED11** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.3 | 0.1 | 29 | 7 |
| **KANSL2** | Up | 1.9 | 0.2 | 26 | 1 | Up | 2.7 | 0.0 | 22 | 2 |
| **TAF3** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.9 | 0.1 | 13 | 1 |
| **ZKSCAN2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.9 | 0.1 | 13 | 1 |
| **IPO13** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.5 | 0.5 | 36 | 16 |
| **NAIP** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.1 | 0.2 | 28 | 8 |
| **PDCL3** | Up | 3.6 | 0.0 | 83 | 1 | Up | 1.0 | 0.5 | 10 | 3 |
| **WIPF3** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **HAUS1** | Up | 4.0 | 0.0 | 111 | 1 | Up | 0.6 | 0.5 | 22 | 9 |
| **POLG2** | Up | 4.5 | 0.1 | 14 | 0 | Up | 0.1 | 0.9 | 14 | 8 |
| **GMPS** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.7 | 0.3 | 27 | 10 |
| **ZEB1** | Up | 4.5 | 0.0 | 151 | 1 | Up | 0.1 | 0.9 | 25 | 14 |
| **BPHL** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.4 | 0.5 | 44 | 20 |
| **MED10** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.4 | 0.6 | 22 | 10 |
| **SLCO3A1** | Up | 1.0 | 0.5 | 14 | 1 | Up | 3.5 | 0.0 | 39 | 2 |
| **ARSK** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **IRAK2** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **PTPLA** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **ELMOD3** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.5 | 0.5 | 26 | 11 |
| **LOC100128822** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **ARGFXP2** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **MIR155HG** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **NKX2-8** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **LOC100505734** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.8 | 0.6 | 6 | 2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ZMYM1** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **PAN3** | Up | 4.5 | 0.0 | 567 | 4 | Up | 0.1 | 0.9 | 24 | 14 |
| **C1QTNF5** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.0 | 0.3 | 20 | 6 |
| **LOC100131089** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.1 | 0.9 | 18 | 10 |
| **BCL2L15** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.2 | 0.8 | 23 | 12 |
| **GOLGA6L5** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **LOC100507228** | Up | 3.5 | 0.3 | 7 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **LOC100506980** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **AMPD1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **C6orf7** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **GAGE1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **GRIN3A** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **HSP90AB3P** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **HYMAI** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LINC00426** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100287413** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100506578** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100506792** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC285103** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC646278** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC728323** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC729173** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **MILR1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **NKPD1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **NSFP1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **PCDHGA7** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **RPL31P11** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **SNORA52** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **USP41** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ZNF695** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ALG1L2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **APCDD1L** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **C19orf18** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **CCL3L1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **CEACAM21** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **FAM180A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **GBAP1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **HTA** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **KLHL23** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC100294020** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC100506834** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC100507559** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC391322** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC400768** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **LOC650157** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **MDS2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **SNORA31** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **ZNF583** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.7 | 0.3 | 2 | 0 |
| **TIPRL** | Up | 2.1 | 0.0 | 56 | 2 | Up | 2.4 | 0.0 | 18 | 2 |
| **CEP128** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **LOC100506778** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **RGS17** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **HRH4** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **LOC100653179** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **LOC339505** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **LRRIQ3** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **DTL** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **FANCE** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.2 | 0.6 | 4 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC100144595** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **PPP1R1B** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.2 | 0.7 | 47 | 25 |
| **LOC645212** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.8 | 0.1 | 17 | 3 |
| **UTP15** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.6 | 0.5 | 15 | 6 |
| **FOXN2** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.2 | 0.9 | 15 | 8 |
| **ENOX1** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.5 | 0.6 | 18 | 8 |
| **LOC100653003** | Up | 4.2 | 0.0 | 125 | 1 | Up | 0.3 | 0.8 | 8 | 4 |
| **TBC1D4** | Up | 3.6 | 0.0 | 80 | 1 | Up | 0.9 | 0.2 | 31 | 10 |
| **FGGY** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **TCTN2** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.8 | 0.2 | 36 | 13 |
| **AEBP2** | Up | 4.3 | 0.0 | 508 | 4 | Up | 0.2 | 0.9 | 20 | 11 |
| **SHFM1** | Up | 3.9 | 0.0 | 667 | 7 | Up | 0.5 | 0.4 | 38 | 16 |
| **CWC25** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.3 | 0.8 | 16 | 8 |
| **CETP** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **NCAPD3** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **NHLRC2** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **SRSF6** | Up | 4.1 | 0.0 | 1173 | 11 | Up | 0.4 | 0.4 | 77 | 37 |
| **ADNP2** | Up | 2.6 | 0.0 | 41 | 1 | Up | 1.8 | 0.1 | 18 | 3 |
| **BDKRB2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **RBM24** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **DPY19L1P1** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.1 | 0.9 | 18 | 10 |
| **SORBS1** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.0 | 1.0 | 63 | 38 |
| **LOC100131347** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.4 | 0.3 | 13 | 3 |
| **NSUN6** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.4 | 0.3 | 13 | 3 |
| **PLXNA2** | Up | 3.3 | 0.0 | 65 | 1 | Up | 1.2 | 0.1 | 33 | 9 |
| **KIAA0586** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.5 | 0.6 | 12 | 5 |
| **PALMD** | Up | 4.0 | 0.0 | 113 | 1 | Up | 0.4 | 0.7 | 19 | 9 |
| **METTL4** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **HIF3A** | Up | 4.4 | 0.1 | 13 | 0 | Up | 0.0 | 1.0 | 28 | 17 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ARID2** | Up | 2.5 | 0.0 | 73 | 2 | Up | 1.9 | 0.0 | 43 | 7 |
| **COX16** | Up | 3.1 | 0.0 | 165 | 3 | Up | 1.3 | 0.0 | 48 | 12 |
| **BNIP1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.9 | 0.3 | 27 | 9 |
| **CBLN4** | Up | 3.6 | 0.0 | 237 | 3 | Up | 0.8 | 0.5 | 14 | 5 |
| **ZNF586** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **COL9A1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.6 | 0.1 | 11 | 1 |
| **CSNK1A1** | Up | 3.5 | 0.0 | 1683 | 24 | Up | 0.9 | 0.0 | 105 | 35 |
| **FLJ43879** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.9 | 0.5 | 12 | 4 |
| **IFLTD1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.9 | 0.4 | 15 | 5 |
| **STX11** | Up | 3.7 | 0.0 | 87 | 1 | Up | 0.7 | 0.5 | 16 | 6 |
| **RAP1GDS1** | Up | 3.4 | 0.0 | 480 | 7 | Up | 0.9 | 0.2 | 28 | 9 |
| **SEC14L1** | Up | 3.8 | 0.0 | 95 | 1 | Up | 0.6 | 0.2 | 63 | 26 |
| **LOC100128482** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **LOC100506214** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **MID2** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.1 | 1.0 | 12 | 7 |
| **LIN52** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **ERN2** | Up | 4.3 | 0.1 | 12 | 0 | Up | 0.1 | 0.9 | 29 | 17 |
| **CDR2L** | Up | 3.0 | 0.0 | 101 | 2 | Up | 1.4 | 0.3 | 13 | 3 |
| **TCN2** | Up | 3.0 | 0.0 | 53 | 1 | Up | 1.4 | 0.1 | 30 | 7 |
| **PNRC2** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.0 | 0.3 | 17 | 5 |
| **SHPRH** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.2 | 0.9 | 13 | 7 |
| **ZNF254** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **SLC36A1** | Up | 3.3 | 0.3 | 6 | 0 | Up | 1.0 | 0.3 | 20 | 6 |
| **C2orf68** | Up | 3.3 | 0.0 | 254 | 4 | Up | 1.0 | 0.1 | 36 | 11 |
| **ACP2** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.6 | 0.3 | 45 | 18 |
| **PRSS3** | Up | 4.2 | 0.1 | 11 | 0 | Up | 0.2 | 0.9 | 11 | 6 |
| **GDPD2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **LOC100507376** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.0 | 0.1 | 20 | 3 |
| **PCDHB7** | Up | 2.3 | 0.5 | 3 | 0 | Up | 2.0 | 0.3 | 7 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **B3GNT1** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.6 | 0.3 | 47 | 19 |
| **ARF6** | Up | 3.8 | 0.0 | 1039 | 12 | Up | 0.5 | 0.3 | 68 | 29 |
| **POGLUT1** | Up | 3.9 | 0.0 | 105 | 1 | Up | 0.4 | 0.7 | 21 | 10 |
| **ZNF238** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.6 | 0.0 | 39 | 8 |
| **FGF11** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.3 | 0.3 | 12 | 3 |
| **PSMD10** | Up | 3.3 | 0.0 | 130 | 2 | Up | 1.0 | 0.1 | 42 | 13 |
| **SLC35D1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.8 | 0.4 | 17 | 6 |
| **CA13** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.6 | 0.3 | 10 | 2 |
| **DYDC1** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **FANCM** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **KANK3** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.4 | 0.6 | 26 | 12 |
| **FAM22D** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **GLT25D1** | Up | 2.2 | 0.0 | 58 | 2 | Up | 2.1 | 0.0 | 43 | 6 |
| **LSM12** | Up | 4.1 | 0.0 | 641 | 6 | Up | 0.2 | 0.8 | 35 | 19 |
| **EDEM1** | Up | 3.0 | 0.0 | 247 | 5 | Up | 1.3 | 0.1 | 36 | 9 |
| **PTBP2** | Up | 3.7 | 0.0 | 89 | 1 | Up | 0.6 | 0.5 | 24 | 10 |
| **LOC100507317** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.5 | 0.1 | 10 | 1 |
| **PLK4** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.5 | 0.1 | 10 | 1 |
| **C12orf26** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **LOC284578** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.5 | 0.4 | 31 | 13 |
| **ZNF324** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.9 | 0.1 | 19 | 3 |
| **MT1A** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **LOC647107** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.5 | 0.0 | 19 | 2 |
| **NEUROG1** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **NKD1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.7 | 0.3 | 27 | 10 |
| **TNRC6B** | Up | 4.1 | 0.0 | 224 | 2 | Up | 0.1 | 0.8 | 48 | 27 |
| **PLXNB3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.9 | 0.0 | 25 | 4 |
| **HECW2** | Up | 3.0 | 0.0 | 54 | 1 | Up | 1.2 | 0.4 | 8 | 2 |
| **RILPL1** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.4 | 0.6 | 27 | 13 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RGCC** | Up | 2.9 | 0.0 | 52 | 1 | Up | 1.3 | 0.0 | 91 | 23 |
| **SET** | Up | 4.0 | 0.0 | 4235 | 44 | Up | 0.3 | 0.4 | 176 | 91 |
| **FBXL22** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **ETNK1** | Up | 3.0 | 0.0 | 308 | 6 | Up | 1.2 | 0.0 | 92 | 25 |
| **MYCN** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.9 | 0.0 | 36 | 6 |
| **LOC100505492** | Up | 1.5 | 0.1 | 38 | 2 | Up | 2.6 | 0.1 | 11 | 1 |
| **MAN2A1** | Up | 2.8 | 0.0 | 47 | 1 | Up | 1.4 | 0.3 | 13 | 3 |
| **TCTEX1D1** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.3 | 0.8 | 12 | 6 |
| **IGFLR1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.8 | 0.1 | 18 | 3 |
| **LOC100509413** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **TRIM34** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **IFT20** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.1 | 0.9 | 32 | 18 |
| **ADAP2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **PTPRE** | Up | 2.5 | 0.0 | 38 | 1 | Up | 1.7 | 0.1 | 21 | 4 |
| **C18orf34** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **DEPDC1B** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **GPC5** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **PUS10** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **ROCK1P1** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **ZNF710** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.8 | 0.0 | 29 | 5 |
| **FAM206A** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.6 | 0.4 | 25 | 10 |
| **FBXL2** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.6 | 0.5 | 15 | 6 |
| **LOC100379224** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.6 | 0.5 | 20 | 8 |
| **RWDD2A** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **TRIM5** | Up | 3.8 | 0.0 | 97 | 1 | Up | 0.3 | 0.8 | 18 | 9 |
| **CLP1** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.2 | 0.8 | 23 | 12 |
| **PGBD3** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **COX14** | Up | 2.3 | 0.0 | 63 | 2 | Up | 1.8 | 0.0 | 35 | 6 |
| **LAMTOR2** | Up | 3.1 | 0.0 | 114 | 2 | Up | 1.0 | 0.2 | 32 | 10 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TCF7L1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.6 | 0.5 | 22 | 9 |
| **TMED10P1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **DLL4** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.4 | 0.7 | 15 | 7 |
| **LYAR** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.4 | 0.7 | 15 | 7 |
| **LOC100508118** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **LOC100653286** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **CSRP2BP** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.6 | 0.5 | 17 | 7 |
| **CKLF** | Up | 1.8 | 0.1 | 46 | 2 | Up | 2.3 | 0.0 | 24 | 3 |
| **PRDM6** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.3 | 0.0 | 17 | 1 |
| **RGR** | Up | 0.8 | 0.7 | 1 | 0 | Up | 3.3 | 0.0 | 17 | 1 |
| **TOP2A** | Up | 0.3 | 0.6 | 108 | 14 | Up | 3.8 | 0.0 | 47 | 2 |
| **CSPG5** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.8 | 0.0 | 28 | 5 |
| **EIF1AD** | Up | 3.3 | 0.0 | 65 | 1 | Up | 0.8 | 0.3 | 26 | 9 |
| **ST8SIA4** | Up | 2.9 | 0.0 | 51 | 1 | Up | 1.2 | 0.1 | 33 | 9 |
| **FAM105A** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.5 | 0.6 | 12 | 5 |
| **NUDT4** | Up | 3.3 | 0.0 | 195 | 3 | Up | 0.7 | 0.1 | 82 | 31 |
| **RAD52** | Up | 1.7 | 0.2 | 22 | 1 | Up | 2.4 | 0.2 | 9 | 1 |
| **LOC541473** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **CCDC167** | Up | 2.6 | 0.0 | 42 | 1 | Up | 1.4 | 0.1 | 22 | 5 |
| **PRKD1** | Up | 1.6 | 0.3 | 20 | 1 | Up | 2.5 | 0.0 | 19 | 2 |
| **LOC100131910** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **CCDC120** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.5 | 0.6 | 14 | 6 |
| **NCEH1** | Up | 4.0 | 0.2 | 10 | 0 | Up | 0.0 | 1.0 | 18 | 11 |
| **LOC283663** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **SCML1** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.7 | 0.3 | 27 | 10 |
| **CELF5** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.3 | 0.1 | 28 | 7 |
| **B3GALT2** | Up | 3.0 | 0.4 | 5 | 0 | Up | 1.0 | 0.4 | 13 | 4 |
| **FAM181A-AS1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **SEPSECS** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.3 | 0.7 | 24 | 12 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **IDNK** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.5 | 0.6 | 16 | 7 |
| **FLG2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.3 | 0.3 | 12 | 3 |
| **CDKN3** | Up | 0.5 | 0.7 | 27 | 3 | Up | 3.5 | 0.0 | 20 | 1 |
| **LILRB3** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **PDZD7** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.9 | 0.3 | 19 | 6 |
| **GPR63** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **ZNF431** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **GTPBP2** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.9 | 0.3 | 25 | 8 |
| **MTRNR2L5** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **TNNC2** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **ZFP30** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **FAM161B** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **LOC100128126** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **CACNG2** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **LOC285074** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **VIM** | Up | 1.8 | 0.0 | 3989 | 184 | Up | 2.2 | 0.0 | 630 | 87 |
| **SMARCAL1** | Up | 0.7 | 0.6 | 21 | 2 | Up | 3.3 | 0.0 | 17 | 1 |
| **KANK4** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.1 | 1.0 | 12 | 7 |
| **IRX5** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.2 | 0.0 | 23 | 3 |
| **REP15** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **NUDT11** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **LOC100128508** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **LOC100506035** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **TMIGD2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **TRAIP** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **RALA** | Up | 3.2 | 0.0 | 235 | 4 | Up | 0.7 | 0.1 | 62 | 23 |
| **RASA4** | Up | 2.1 | 0.0 | 140 | 5 | Up | 1.8 | 0.0 | 39 | 7 |
| **SLC27A1** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.9 | 0.3 | 27 | 9 |
| **ZNF337** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.6 | 0.5 | 20 | 8 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MYLIP** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.4 | 0.5 | 47 | 22 |
| **IPP** | Up | 0.8 | 0.6 | 12 | 1 | Up | 3.1 | 0.0 | 15 | 1 |
| **TYW1** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.2 | 0.8 | 28 | 15 |
| **MYO3B** | Up | 3.9 | 0.2 | 9 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LOC100652933** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.9 | 0.5 | 12 | 4 |
| **RPL23AP7** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.2 | 0.9 | 13 | 7 |
| **KDELC1** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **PTTG1** | Up | 3.2 | 0.0 | 121 | 2 | Up | 0.7 | 0.4 | 26 | 10 |
| **PCBP4** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.6 | 0.3 | 54 | 22 |
| **C11orf10** | Up | 3.5 | 0.0 | 223 | 3 | Up | 0.4 | 0.7 | 23 | 11 |
| **RANBP1** | Up | 2.5 | 0.0 | 38 | 1 | Up | 1.4 | 0.0 | 82 | 19 |
| **LOC100131691** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **DKFZP564C196** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.1 | 0.4 | 11 | 3 |
| **GPATCH1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.1 | 0.4 | 11 | 3 |
| **B3GALNT2** | Up | 3.2 | 0.0 | 228 | 4 | Up | 0.7 | 0.5 | 16 | 6 |
| **C7orf60** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.2 | 0.9 | 11 | 6 |
| **SNAPC1** | Up | 3.5 | 0.0 | 148 | 2 | Up | 0.4 | 0.7 | 21 | 10 |
| **ASB4** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.1 | 0.1 | 32 | 9 |
| **RIT1** | Up | 3.6 | 0.0 | 163 | 2 | Up | 0.2 | 0.8 | 26 | 14 |
| **CNTRL** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.1 | 0.9 | 9 | 5 |
| **LOC145474** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **MGC2889** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **NAP1L6** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **SLAMF6** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **TMEM194B** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **ZNF420** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **MRAS** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.5 | 0.3 | 47 | 20 |
| **TXNDC5** | Up | 2.5 | 0.0 | 903 | 25 | Up | 1.3 | 0.0 | 151 | 38 |
| **LOC100653004** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.8 | 0.7 | 3 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **NCRUPAR** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **ZNF354B** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **MFSD11** | Up | 1.9 | 0.0 | 50 | 2 | Up | 1.9 | 0.0 | 78 | 13 |
| **MTCP1NB** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.1 | 0.0 | 21 | 3 |
| **PARP14** | Up | 3.3 | 0.0 | 248 | 4 | Up | 0.5 | 0.3 | 66 | 28 |
| **SLC44A3** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.1 | 0.1 | 38 | 11 |
| **CHD6** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.3 | 0.6 | 38 | 19 |
| **CMC1** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.3 | 0.8 | 16 | 8 |
| **KLHL7** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.3 | 0.7 | 32 | 16 |
| **ZSWIM3** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.3 | 0.8 | 10 | 5 |
| **TMEM183B** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **TMEM204** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.1 | 0.9 | 26 | 15 |
| **DHRS4L2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.1 | 0.1 | 34 | 10 |
| **SPRY1** | Up | 2.3 | 0.1 | 34 | 1 | Up | 1.5 | 0.0 | 45 | 10 |
| **NDUFB4** | Up | 3.2 | 0.0 | 173 | 3 | Up | 0.6 | 0.4 | 30 | 12 |
| **SULF2** | Up | 2.0 | 0.0 | 177 | 7 | Up | 1.8 | 0.0 | 39 | 7 |
| **C14orf45** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **SAYSD1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.4 | 0.1 | 31 | 7 |
| **GSTTP2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **LOC100506917** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **ZNF416** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **FOXO3B** | Up | 2.5 | 0.0 | 38 | 1 | Up | 1.3 | 0.3 | 12 | 3 |
| **RIMKLB** | Up | 2.8 | 0.0 | 48 | 1 | Up | 0.9 | 0.2 | 31 | 10 |
| **SBF2** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.0 | 1.0 | 20 | 12 |
| **MUTED** | Up | 0.4 | 0.7 | 17 | 2 | Up | 3.3 | 0.0 | 18 | 1 |
| **NANOS1** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.4 | 0.5 | 44 | 20 |
| **LOC100508939** | Up | 3.7 | 0.2 | 8 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **CD101** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **LOC339400** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.4 | 0.3 | 9 | 2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SEC22B** | Up | 3.2 | 0.0 | 757 | 13 | Up | 0.5 | 0.5 | 21 | 9 |
| **SNCAIP** | Up | 1.8 | 0.6 | 2 | 0 | Up | 2.0 | 0.0 | 26 | 4 |
| **SERINC5** | Up | 2.5 | 0.0 | 250 | 7 | Up | 1.2 | 0.0 | 53 | 14 |
| **ZNF22** | Up | 3.1 | 0.0 | 114 | 2 | Up | 0.6 | 0.4 | 32 | 13 |
| **FAM43A** | Up | 2.6 | 0.0 | 77 | 2 | Up | 1.1 | 0.4 | 11 | 3 |
| **MARCH6** | Up | 2.7 | 0.0 | 44 | 1 | Up | 1.0 | 0.1 | 53 | 16 |
| **LOC92249** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.4 | 0.6 | 26 | 12 |
| **FLJ37453** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.7 | 0.2 | 65 | 25 |
| **LEMD2** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.7 | 0.3 | 39 | 15 |
| **FBXL19-AS1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.0 | 0.4 | 13 | 4 |
| **KIAA0895L** | Up | 2.7 | 0.4 | 4 | 0 | Up | 1.0 | 0.2 | 32 | 10 |
| **C14orf2** | Up | 3.4 | 0.0 | 276 | 4 | Up | 0.3 | 0.7 | 37 | 19 |
| **LOC100128292** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.4 | 0.3 | 13 | 3 |
| **PHF2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.9 | 0.0 | 38 | 6 |
| **CENPF** | Up | 0.0 | 1.0 | 38 | 6 | Up | 3.7 | 0.0 | 23 | 1 |
| **BRCC3** | Up | 3.5 | 0.0 | 75 | 1 | Up | 0.2 | 0.8 | 21 | 11 |
| **TTBK2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.4 | 0.2 | 17 | 4 |
| **SMAD6** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.6 | 0.2 | 66 | 26 |
| **ZSCAN16** | Up | 1.3 | 0.4 | 17 | 1 | Up | 2.4 | 0.2 | 9 | 1 |
| **MRPL24** | Up | 2.2 | 0.0 | 118 | 4 | Up | 1.5 | 0.1 | 27 | 6 |
| **PDS5B** | Up | 3.5 | 0.0 | 76 | 1 | Up | 0.2 | 0.8 | 26 | 14 |
| **TRAPPC2L** | Up | 2.8 | 0.0 | 133 | 3 | Up | 0.9 | 0.2 | 36 | 12 |
| **TMEM43** | Up | 2.9 | 0.0 | 51 | 1 | Up | 0.8 | 0.1 | 63 | 23 |
| **TSPAN5** | Up | 3.0 | 0.0 | 107 | 2 | Up | 0.6 | 0.2 | 70 | 28 |
| **CYP2R1** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.4 | 0.7 | 21 | 10 |
| **TOX4** | Up | 3.3 | 0.0 | 316 | 5 | Up | 0.3 | 0.5 | 66 | 32 |
| **LOC100652936** | Up | 3.6 | 0.0 | 154 | 2 | Up | 0.1 | 0.9 | 7 | 4 |
| **LOC732360** | Up | 2.2 | 0.1 | 32 | 1 | Up | 1.4 | 0.3 | 9 | 2 |
| **SEMA4F** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.6 | 0.6 | 10 | 4 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ALPK3** | Up | 2.2 | 0.1 | 31 | 1 | Up | 1.4 | 0.2 | 18 | 4 |
| **PDPN** | Up | 1.8 | 0.0 | 107 | 5 | Up | 1.9 | 0.0 | 30 | 5 |
| **ZNF785** | Up | 1.6 | 0.3 | 21 | 1 | Up | 2.0 | 0.1 | 20 | 3 |
| **LOC100129516** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **SASS6** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **DTNA** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.9 | 0.1 | 57 | 19 |
| **MYLPF** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.9 | 0.0 | 24 | 4 |
| **KLHL4** | Up | 2.4 | 0.1 | 36 | 1 | Up | 1.2 | 0.6 | 4 | 1 |
| **CASP4** | Up | 3.2 | 0.0 | 465 | 8 | Up | 0.4 | 0.6 | 30 | 14 |
| **ANGEL1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.3 | 0.1 | 32 | 8 |
| **MRPL53** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.1 | 0.9 | 31 | 18 |
| **OAZ3** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.8 | 0.1 | 18 | 3 |
| **SULT1E1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.8 | 0.1 | 18 | 3 |
| **CCDC99** | Up | 1.6 | 0.3 | 20 | 1 | Up | 2.0 | 0.1 | 14 | 2 |
| **C6orf52** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.9 | 0.5 | 12 | 4 |
| **SNRPD3** | Up | 3.0 | 0.0 | 104 | 2 | Up | 0.6 | 0.4 | 27 | 11 |
| **LOC257396** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.3 | 0.8 | 14 | 7 |
| **PLEKHG6** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.1 | 1.0 | 12 | 7 |
| **AOC4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ARL13A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **C10orf71** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **C7orf65** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **CTAGE11P** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **CYP4F30P** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **CYSLTR1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ERCC6L** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **FABP5P3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **FAM18B2-CDRT4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **FCRL6** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **FLJ44313** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **GCET2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **HCG25** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **KCNK17** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LINC00575** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100129636** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100133077** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100287216** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100293962** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100505769** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100505835** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100506122** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100506126** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100507447** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100507600** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100508384** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC100652843** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC170425** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC284294** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC286370** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC400706** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC442132** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC643401** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC648570** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC729313** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LPPR4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.0 | 34 | 3 |
| **LYG2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **MGC39372** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **NAA11** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **NANOGNB** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **PKD1L3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **RBM14-RBM4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **RPL23AP32** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **SNORA58** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **SNORD14B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **TPI1P3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **TRIM60** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **VWA5B2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **VWC2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ZNF322B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ZNF454** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ZNF660** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **ZNF860** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOC157381** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.3 | 0.3 | 12 | 3 |
| **HELQ** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.3 | 0.8 | 8 | 4 |
| **TAF1A** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.3 | 0.8 | 8 | 4 |
| **TCTEX1D2** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.3 | 0.8 | 8 | 4 |
| **LOC100653227** | Up | 3.3 | 0.0 | 1204 | 19 | Up | 0.2 | 0.5 | 90 | 47 |
| **LETM1** | Up | 3.4 | 0.0 | 136 | 2 | Up | 0.2 | 0.8 | 28 | 15 |
| **LOC100132707** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **ARL6** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **RPL36AL** | Up | 3.4 | 0.0 | 600 | 9 | Up | 0.2 | 0.8 | 31 | 17 |
| **COL4A1** | Up | 2.1 | 0.0 | 401 | 15 | Up | 1.5 | 0.0 | 104 | 23 |
| **CNTNAP1** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.5 | 0.5 | 19 | 8 |
| **DEXI** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.5 | 0.4 | 40 | 17 |
| **IL7** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **FAM222B** | Up | 2.7 | 0.0 | 45 | 1 | Up | 0.8 | 0.3 | 29 | 10 |
| **LECT1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.8 | 0.0 | 51 | 9 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RGS20** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **ZNF323** | Up | 3.5 | 0.3 | 7 | 0 | Up | 0.0 | 1.0 | 10 | 6 |
| **DPM3** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.8 | 0.4 | 20 | 7 |
| **UBE2D4** | Up | 3.1 | 0.0 | 60 | 1 | Up | 0.4 | 0.5 | 45 | 21 |
| **EFNA2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **LOC100506079** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **SMOX** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.8 | 0.0 | 45 | 8 |
| **NDUFB2** | Up | 2.5 | 0.0 | 146 | 4 | Up | 1.0 | 0.2 | 33 | 10 |
| **TM2D1** | Up | 2.8 | 0.0 | 47 | 1 | Up | 0.7 | 0.2 | 41 | 15 |
| **CBWD6** | Up | 3.0 | 0.0 | 56 | 1 | Up | 0.5 | 0.8 | 7 | 3 |
| **DSCR6** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **PIGB** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **EIF2C3** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **MBL1P** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **MMP16** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **ZNF248** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.8 | 0.2 | 34 | 12 |
| **ZSCAN12** | Up | 2.2 | 0.1 | 32 | 1 | Up | 1.3 | 0.2 | 20 | 5 |
| **CSMD1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **FUK** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.2 | 0.2 | 19 | 5 |
| **POM121L8P** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **SGK196** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **USH2A** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **SPIRE2** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.5 | 0.6 | 16 | 7 |
| **C8orf59** | Up | 3.1 | 0.0 | 58 | 1 | Up | 0.4 | 0.5 | 48 | 22 |
| **CELF3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.2 | 0.3 | 15 | 4 |
| **DCLRE1C** | Up | 2.7 | 0.0 | 87 | 2 | Up | 0.8 | 0.3 | 25 | 9 |
| **PHTF2** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.2 | 0.9 | 15 | 8 |
| **EPG5** | Up | 1.7 | 0.1 | 42 | 2 | Up | 1.8 | 0.0 | 29 | 5 |
| **MBTD1** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.5 | 0.6 | 18 | 8 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TFB1M** | Up | 3.1 | 0.0 | 60 | 1 | Up | 0.4 | 0.7 | 21 | 10 |
| **CBR4** | Up | 2.8 | 0.0 | 46 | 1 | Up | 0.7 | 0.4 | 19 | 7 |
| **LOC100286925** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **NAA15** | Up | 2.3 | 0.0 | 161 | 5 | Up | 1.1 | 0.3 | 18 | 5 |
| **LOC100505669** | Up | 2.6 | 0.0 | 42 | 1 | Up | 0.8 | 0.2 | 44 | 15 |
| **ADAM17** | Up | 3.0 | 0.0 | 246 | 5 | Up | 0.5 | 0.6 | 14 | 6 |
| **MTPAP** | Up | 3.4 | 0.0 | 331 | 5 | Up | 0.1 | 0.9 | 31 | 18 |
| **DHODH** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.1 | 0.4 | 11 | 3 |
| **ZNF425** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **MYRIP** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **POSTN** | Up | 1.0 | 0.1 | 124 | 10 | Up | 2.5 | 0.0 | 46 | 5 |
| **C12orf77** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.4 | 0.7 | 11 | 5 |
| **F8** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.4 | 0.7 | 11 | 5 |
| **CDK1** | Up | 0.8 | 0.3 | 67 | 6 | Up | 2.6 | 0.0 | 21 | 2 |
| **LOC100506411** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.6 | 0.1 | 11 | 1 |
| **HNRPLL** | Up | 2.5 | 0.0 | 38 | 1 | Up | 1.0 | 0.2 | 32 | 10 |
| **ANKS1B** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.7 | 0.2 | 51 | 19 |
| **NDUFA1** | Up | 2.9 | 0.0 | 241 | 5 | Up | 0.5 | 0.4 | 42 | 18 |
| **PKIA** | Up | 1.9 | 0.2 | 26 | 1 | Up | 1.5 | 0.0 | 56 | 12 |
| **UBE2E3** | Up | 2.3 | 0.0 | 63 | 2 | Up | 1.2 | 0.0 | 62 | 17 |
| **EIF2C1** | Up | 2.1 | 0.0 | 80 | 3 | Up | 1.4 | 0.1 | 34 | 8 |
| **SNCA** | Up | 2.9 | 0.0 | 146 | 3 | Up | 0.5 | 0.5 | 30 | 13 |
| **NEDD8** | Up | 3.1 | 0.0 | 222 | 4 | Up | 0.3 | 0.5 | 60 | 30 |
| **LOC100505776** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.1 | 0.9 | 9 | 5 |
| **LOC388152** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.7 | 0.1 | 16 | 3 |
| **LOC100505813** | Up | 2.4 | 0.0 | 335 | 10 | Up | 1.0 | 0.0 | 212 | 65 |
| **UBL5** | Up | 2.9 | 0.0 | 142 | 3 | Up | 0.5 | 0.3 | 47 | 20 |
| **C7orf31** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.7 | 0.1 | 21 | 4 |
| **ZFHX3** | Up | 1.6 | 0.0 | 77 | 4 | Up | 1.8 | 0.0 | 58 | 10 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CD2** | Up | 0.5 | 0.7 | 19 | 2 | Up | 2.9 | 0.1 | 13 | 1 |
| **AHRR** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.1 | 0.2 | 21 | 6 |
| **ZNHIT2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.1 | 0.0 | 87 | 25 |
| **LOC100170939** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **CDKAL1** | Up | 2.3 | 0.1 | 34 | 1 | Up | 1.1 | 0.3 | 14 | 4 |
| **TET3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.1 | 0.3 | 14 | 4 |
| **STK36** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.1 | 0.9 | 21 | 12 |
| **CKS2** | Up | 2.5 | 0.0 | 111 | 3 | Up | 0.9 | 0.5 | 9 | 3 |
| **CHMP3** | Up | 3.0 | 0.0 | 103 | 2 | Up | 0.4 | 0.3 | 92 | 43 |
| **MRPL33** | Up | 3.1 | 0.0 | 111 | 2 | Up | 0.3 | 0.7 | 24 | 12 |
| **JAK3** | Up | 2.2 | 0.0 | 119 | 4 | Up | 1.1 | 0.4 | 11 | 3 |
| **MIR568** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **NSUN7** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **USP29** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **RBMXL1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.6 | 0.4 | 28 | 11 |
| **MRPS24** | Up | 2.1 | 0.0 | 82 | 3 | Up | 1.3 | 0.2 | 16 | 4 |
| **AFAP1L1** | Up | 3.0 | 0.0 | 54 | 1 | Up | 0.4 | 0.7 | 17 | 8 |
| **HOXB3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.0 | 0.3 | 17 | 5 |
| **TTC9B** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.0 | 0.3 | 17 | 5 |
| **C20orf194** | Up | 2.5 | 0.0 | 38 | 1 | Up | 0.9 | 0.2 | 39 | 13 |
| **CCDC72** | Up | 3.0 | 0.0 | 466 | 9 | Up | 0.3 | 0.5 | 58 | 29 |
| **FAM111A** | Up | 3.2 | 0.0 | 120 | 2 | Up | 0.1 | 0.8 | 34 | 19 |
| **ANKRD13B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.6 | 0.2 | 15 | 3 |
| **NYNRIN** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.6 | 0.2 | 15 | 3 |
| **KIAA1147** | Up | 2.7 | 0.0 | 45 | 1 | Up | 0.6 | 0.3 | 42 | 17 |
| **LOC100507473** | Up | 3.0 | 0.0 | 293 | 6 | Up | 0.4 | 0.5 | 63 | 30 |
| **CCDC146** | Up | 3.3 | 0.3 | 6 | 0 | Up | 0.0 | 1.0 | 20 | 12 |
| **C20orf118** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.5 | 0.1 | 10 | 1 |
| **LOC100506866** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.5 | 0.1 | 10 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RNF182** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.5 | 0.1 | 10 | 1 |
| **TIMP4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.5 | 0.1 | 10 | 1 |
| **TPSG1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.5 | 0.1 | 10 | 1 |
| **KDM8** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **SSBP1** | Up | 2.5 | 0.0 | 145 | 4 | Up | 0.8 | 0.1 | 66 | 23 |
| **NCOA2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.6 | 0.3 | 10 | 2 |
| **STX8** | Up | 1.6 | 0.0 | 75 | 4 | Up | 1.8 | 0.1 | 17 | 3 |
| **YWHAZ** | Up | 2.8 | 0.0 | 2511 | 57 | Up | 0.5 | 0.0 | 247 | 108 |
| **CHODL** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **LINC00514** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **LOC442075** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **LOC728034** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **FAM198B** | Up | 2.9 | 0.0 | 96 | 2 | Up | 0.4 | 0.6 | 24 | 11 |
| **TMEM194A** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.6 | 0.0 | 29 | 6 |
| **PLCE1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.5 | 0.0 | 28 | 3 |
| **GYPE** | Up | 2.8 | 0.0 | 88 | 2 | Up | 0.5 | 0.6 | 12 | 5 |
| **FLJ39639** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **SULT1C4** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **RPL26L1** | Up | 1.8 | 0.0 | 65 | 3 | Up | 1.5 | 0.1 | 24 | 5 |
| **SPRY4** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.0 | 0.4 | 13 | 4 |
| **LOC728485** | Up | 2.3 | 0.5 | 3 | 0 | Up | 1.0 | 0.3 | 16 | 5 |
| **GTF2H5** | Up | 2.8 | 0.0 | 48 | 1 | Up | 0.5 | 0.5 | 36 | 16 |
| **LOC541471** | Up | 3.3 | 0.0 | 243 | 4 | Up | 0.0 | 1.0 | 5 | 3 |
| **PWWP2B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.5 | 0.1 | 19 | 4 |
| **RAD51D** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.5 | 0.1 | 19 | 4 |
| **PIGX** | Up | 2.1 | 0.1 | 30 | 1 | Up | 1.1 | 0.0 | 72 | 20 |
| **GPI** | Up | 3.2 | 0.0 | 2309 | 39 | Up | 0.0 | 1.0 | 135 | 82 |
| **LOC100129935** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **DNAJC28** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.5 | 0.5 | 5 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC100507401** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **LOC256880** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **LOC646329** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **PCDHA9** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **TMEM241** | Up | 1.3 | 0.4 | 17 | 1 | Up | 1.9 | 0.1 | 13 | 2 |
| **WDR70** | Up | 0.8 | 0.5 | 22 | 2 | Up | 2.5 | 0.1 | 10 | 1 |
| **PDE6D** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.9 | 0.3 | 19 | 6 |
| **FABP5** | Up | 2.8 | 0.0 | 479 | 11 | Up | 0.5 | 0.4 | 54 | 24 |
| **CCDC82** | Up | 2.9 | 0.0 | 50 | 1 | Up | 0.4 | 0.7 | 17 | 8 |
| **TTC7B** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.2 | 0.8 | 19 | 10 |
| **ING3** | Up | 2.0 | 0.0 | 199 | 8 | Up | 1.3 | 0.3 | 12 | 3 |
| **AAED1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.5 | 0.1 | 23 | 5 |
| **OLFML1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.5 | 0.2 | 14 | 3 |
| **BPTF** | Up | 2.8 | 0.0 | 48 | 1 | Up | 0.4 | 0.4 | 52 | 24 |
| **SNRPA1** | Up | 2.8 | 0.0 | 46 | 1 | Up | 0.5 | 0.5 | 34 | 15 |
| **DIAPH2** | Up | 1.8 | 0.2 | 24 | 1 | Up | 1.4 | 0.3 | 9 | 2 |
| **C3orf70** | Up | 1.6 | 0.3 | 20 | 1 | Up | 1.7 | 0.1 | 16 | 3 |
| **MRPL40** | Up | 1.5 | 0.2 | 37 | 2 | Up | 1.7 | 0.0 | 38 | 7 |
| **WDR27** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.4 | 0.0 | 18 | 2 |
| **GSDMC** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **PRKAR2A** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **LOC100505519** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.2 | 0.9 | 13 | 7 |
| **IPCEF1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.5 | 0.6 | 16 | 7 |
| **MRPS18C** | Up | 3.1 | 0.0 | 163 | 3 | Up | 0.1 | 0.9 | 16 | 9 |
| **LOC100505487** | Up | 2.5 | 0.0 | 184 | 5 | Up | 0.7 | 0.2 | 52 | 20 |
| **EEF1E1** | Up | 2.8 | 0.0 | 49 | 1 | Up | 0.4 | 0.7 | 21 | 10 |
| **ITGA6** | Up | 2.7 | 0.0 | 202 | 5 | Up | 0.5 | 0.3 | 56 | 24 |
| **LYSMD3** | Up | 2.8 | 0.0 | 48 | 1 | Up | 0.4 | 0.7 | 17 | 8 |
| **PEX7** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.4 | 0.2 | 18 | 4 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **EVC** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.4 | 0.0 | 88 | 20 |
| **HERPUD2** | Up | 1.6 | 0.1 | 60 | 3 | Up | 1.5 | 0.1 | 24 | 5 |
| **ANKRD6** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **RRP15** | Up | 2.3 | 0.0 | 153 | 5 | Up | 0.9 | 0.1 | 52 | 17 |
| **LCORL** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.9 | 0.4 | 15 | 5 |
| **LINC00493** | Up | 2.8 | 0.0 | 46 | 1 | Up | 0.4 | 0.7 | 11 | 5 |
| **CCNJL** | Up | 0.8 | 0.6 | 12 | 1 | Up | 2.4 | 0.2 | 9 | 1 |
| **XKR5** | Up | 0.4 | 0.8 | 9 | 1 | Up | 2.8 | 0.0 | 23 | 2 |
| **PSME1** | Up | 2.0 | 0.0 | 673 | 27 | Up | 1.2 | 0.0 | 81 | 22 |
| **HEY2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **C17orf57** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **FAM111B** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.2 | 38 | 13 |
| **GPR143** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100507487** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **ZNF484** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **DNAPTP3** | Up | 2.3 | 0.0 | 822 | 26 | Up | 0.8 | 0.0 | 174 | 61 |
| **COX17** | Up | 2.4 | 0.0 | 137 | 4 | Up | 0.7 | 0.2 | 38 | 14 |
| **CHKB** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.1 | 0.8 | 46 | 26 |
| **ANKRD65** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.1 | 0.9 | 30 | 17 |
| **ATXN7L1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.4 | 0.6 | 26 | 12 |
| **IDI2** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.1 | 0.9 | 14 | 8 |
| **C20orf112** | Up | 1.9 | 0.2 | 26 | 1 | Up | 1.2 | 0.0 | 45 | 12 |
| **HEATR1** | Up | 1.6 | 0.3 | 20 | 1 | Up | 1.6 | 0.2 | 15 | 3 |
| **HSBP1** | Up | 2.1 | 0.0 | 520 | 19 | Up | 1.0 | 0.0 | 146 | 45 |
| **DNAJC10** | Up | 2.7 | 0.0 | 84 | 2 | Up | 0.4 | 0.5 | 31 | 14 |
| **LNX1** | Up | 2.7 | 0.0 | 84 | 2 | Up | 0.4 | 0.6 | 20 | 9 |
| **INPP5A** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.4 | 0.5 | 41 | 19 |
| **RGS1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.4 | 0.5 | 43 | 20 |
| **SWSAP1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.4 | 0.7 | 13 | 6 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC100506143** | Up | 1.3 | 0.4 | 17 | 1 | Up | 1.8 | 0.0 | 57 | 10 |
| **LOC100128682** | Up | 0.6 | 0.6 | 20 | 2 | Up | 2.5 | 0.1 | 10 | 1 |
| **FLJ41423** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **KCNK2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LOC100130331** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LOC100506639** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **NAF1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **C4orf46** | Up | 1.6 | 0.3 | 21 | 1 | Up | 1.5 | 0.2 | 14 | 3 |
| **WDR43** | Up | 2.6 | 0.0 | 154 | 4 | Up | 0.5 | 0.5 | 21 | 9 |
| **GALNT1** | Up | 2.7 | 0.0 | 160 | 4 | Up | 0.4 | 0.5 | 42 | 19 |
| **RBM6** | Up | 3.1 | 0.0 | 214 | 4 | Up | 0.0 | 1.0 | 56 | 34 |
| **GTF2IRD1** | Up | 1.8 | 0.2 | 24 | 1 | Up | 1.3 | 0.1 | 24 | 6 |
| **GALNT10** | Up | 1.4 | 0.1 | 52 | 3 | Up | 1.7 | 0.0 | 57 | 11 |
| **CD8A** | Up | 2.3 | 0.0 | 156 | 5 | Up | 0.8 | 0.1 | 56 | 20 |
| **CAPN5** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.2 | 39 | 14 |
| **GRPEL1** | Up | 3.1 | 0.0 | 57 | 1 | Up | 0.0 | 1.0 | 33 | 20 |
| **THAP1** | Up | 1.8 | 0.1 | 46 | 2 | Up | 1.3 | 0.3 | 12 | 3 |
| **JAG2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.3 | 0.1 | 33 | 8 |
| **METTL16** | Up | 1.1 | 0.4 | 28 | 2 | Up | 2.0 | 0.0 | 52 | 8 |
| **ZNF629** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.8 | 0.5 | 14 | 5 |
| **LSM14B** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.3 | 0.6 | 29 | 14 |
| **CNEP1R1** | Up | 1.8 | 0.0 | 67 | 3 | Up | 1.3 | 0.3 | 12 | 3 |
| **CDH23** | Up | 0.6 | 0.7 | 10 | 1 | Up | 2.5 | 0.1 | 10 | 1 |
| **SDF2** | Up | 3.0 | 0.0 | 107 | 2 | Up | 0.0 | 1.0 | 25 | 15 |
| **SPTBN1** | Up | 2.8 | 0.0 | 403 | 9 | Up | 0.2 | 0.3 | 321 | 169 |
| **ZFYVE28** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **TOMM6** | Up | 1.4 | 0.0 | 84 | 5 | Up | 1.6 | 0.0 | 137 | 27 |
| **FLJ23867** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.2 | 0.0 | 31 | 4 |
| **TCF7L2** | Up | 2.9 | 0.0 | 50 | 1 | Up | 0.2 | 0.8 | 42 | 23 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TYRO3** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.3 | 0.1 | 28 | 7 |
| **ZBTB8OS** | Up | 1.6 | 0.3 | 20 | 1 | Up | 1.5 | 0.2 | 14 | 3 |
| **PARPBP** | Up | 1.0 | 0.5 | 14 | 1 | Up | 2.0 | 0.3 | 7 | 1 |
| **SPAG16** | Up | 3.0 | 0.4 | 5 | 0 | Up | 0.0 | 1.0 | 31 | 19 |
| **CWF19L1** | Up | 1.8 | 0.1 | 46 | 2 | Up | 1.2 | 0.2 | 19 | 5 |
| **ZNF765** | Up | 1.3 | 0.4 | 17 | 1 | Up | 1.7 | 0.2 | 11 | 2 |
| **SLC4A8** | Up | 2.3 | 0.0 | 122 | 4 | Up | 0.8 | 0.1 | 58 | 21 |
| **C2orf55** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.3 | 0.7 | 28 | 14 |
| **YY1** | Up | 1.4 | 0.1 | 69 | 4 | Up | 1.6 | 0.0 | 176 | 36 |
| **KIF2A** | Up | 1.1 | 0.4 | 27 | 2 | Up | 2.0 | 0.0 | 45 | 7 |
| **LUC7L** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.7 | 0.3 | 37 | 14 |
| **FKBP7** | Up | 2.6 | 0.0 | 41 | 1 | Up | 0.4 | 0.7 | 11 | 5 |
| **B3GNTL1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.3 | 0.8 | 8 | 4 |
| **LHFP** | Up | 2.8 | 0.0 | 46 | 1 | Up | 0.3 | 0.7 | 31 | 16 |
| **KIF23** | Up | 2.9 | 0.0 | 50 | 1 | Up | 0.1 | 0.9 | 9 | 5 |
| **MANSC1** | Up | 2.9 | 0.0 | 52 | 1 | Up | 0.1 | 1.0 | 12 | 7 |
| **DISP2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **LOC100652764** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **ZNF707** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.2 | 0.2 | 8 | 1 |
| **ZNF17** | Up | 0.2 | 0.9 | 8 | 1 | Up | 2.8 | 0.5 | 1 | 0 |
| **LOH12CR1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **MCHR1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **LINC00114** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **LOC100270679** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **TBC1D16** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **BCORL1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **FLJ33360** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **ZNF300P1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **FANCI** | Up | 1.3 | 0.2 | 32 | 2 | Up | 1.7 | 0.2 | 11 | 2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **PLD2** | Up | 1.1 | 0.5 | 15 | 1 | Up | 1.9 | 0.0 | 24 | 4 |
| **HYAL2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.3 | 0.7 | 41 | 21 |
| **PCDH8** | Up | 1.6 | 0.3 | 21 | 1 | Up | 1.4 | 0.2 | 17 | 4 |
| **CTLA4** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **WBP1L** | Up | 2.6 | 0.0 | 78 | 2 | Up | 0.4 | 0.5 | 47 | 22 |
| **ZNF512** | Up | 2.1 | 0.1 | 30 | 1 | Up | 0.8 | 0.2 | 38 | 13 |
| **PHKG1** | Up | 2.5 | 0.0 | 39 | 1 | Up | 0.5 | 0.6 | 18 | 8 |
| **C14orf101** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.8 | 27 | 14 |
| **SFXN4** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.8 | 25 | 13 |
| **ADAM10** | Up | 2.9 | 0.0 | 52 | 1 | Up | 0.0 | 1.0 | 15 | 9 |
| **DLX1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.1 | 0.1 | 15 | 2 |
| **FGF12** | Up | 2.4 | 0.0 | 139 | 4 | Up | 0.5 | 0.5 | 21 | 9 |
| **FLJ41941** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **GNGT2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **ITPK1-AS1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC100652967** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **MRPL45P2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **PRKCA** | Up | 2.9 | 0.0 | 233 | 5 | Up | 0.1 | 0.9 | 43 | 25 |
| **APOBEC3B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **C3orf43** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **LOC401176** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **PRR23C** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **ZNF701** | Up | 1.7 | 0.2 | 22 | 1 | Up | 1.3 | 0.3 | 12 | 3 |
| **SS18L2** | Up | 0.9 | 0.3 | 49 | 4 | Up | 2.0 | 0.0 | 40 | 6 |
| **SLC27A3** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.8 | 19 | 10 |
| **KIF18A** | Up | 0.8 | 0.5 | 22 | 2 | Up | 2.2 | 0.2 | 8 | 1 |
| **IFNGR1** | Up | 2.6 | 0.0 | 41 | 1 | Up | 0.4 | 0.5 | 42 | 20 |
| **LOC100507283** | Up | 2.7 | 0.0 | 82 | 2 | Up | 0.3 | 0.8 | 20 | 10 |
| **TAOK2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.2 | 0.1 | 30 | 8 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TNNI1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.8 | 32 | 17 |
| **SMA4** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.2 | 0.3 | 15 | 4 |
| **MGST3** | Up | 2.2 | 0.0 | 197 | 7 | Up | 0.8 | 0.0 | 97 | 35 |
| **BRAF** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.6 | 0.4 | 30 | 12 |
| **SNRPG** | Up | 1.5 | 0.0 | 190 | 11 | Up | 1.5 | 0.0 | 54 | 12 |
| **NOL9** | Up | 2.7 | 0.0 | 283 | 7 | Up | 0.2 | 0.6 | 69 | 36 |
| **TNFAIP3** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.2 | 0.8 | 39 | 21 |
| **ZNF618** | Up | 1.6 | 0.3 | 21 | 1 | Up | 1.3 | 0.0 | 40 | 10 |
| **FOXRED2** | Up | 1.5 | 0.2 | 37 | 2 | Up | 1.4 | 0.1 | 22 | 5 |
| **LRRN4** | Up | 2.6 | 0.0 | 150 | 4 | Up | 0.4 | 0.7 | 23 | 11 |
| **FLJ31306** | Up | 2.6 | 0.0 | 152 | 4 | Up | 0.3 | 0.5 | 47 | 23 |
| **URGCP-MRPS24** | Up | 1.5 | 0.1 | 53 | 3 | Up | 1.4 | 0.2 | 18 | 4 |
| **ASB11** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **C6orf57** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **FUT11** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **SNX22** | Up | 0.7 | 0.7 | 11 | 1 | Up | 2.2 | 0.0 | 38 | 5 |
| **LOC283693** | Up | 0.5 | 0.7 | 19 | 2 | Up | 2.4 | 0.2 | 9 | 1 |
| **DERL2** | Up | 2.3 | 0.0 | 126 | 4 | Up | 0.6 | 0.4 | 32 | 13 |
| **SGPL1** | Up | 2.4 | 0.0 | 104 | 3 | Up | 0.5 | 0.5 | 38 | 17 |
| **FBXO17** | Up | 2.3 | 0.0 | 62 | 2 | Up | 0.6 | 0.3 | 33 | 13 |
| **POF1B** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.6 | 0.5 | 17 | 7 |
| **ST3GAL3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.6 | 0.3 | 41 | 17 |
| **MORC4** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.3 | 18 | 5 |
| **MYL3** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.3 | 18 | 5 |
| **KIF15** | Up | 0.2 | 0.9 | 8 | 1 | Up | 2.6 | 0.1 | 11 | 1 |
| **PPIH** | Up | 0.1 | 0.9 | 7 | 1 | Up | 2.8 | 0.0 | 24 | 2 |
| **STX2** | Up | 2.2 | 0.1 | 31 | 1 | Up | 0.7 | 0.4 | 21 | 8 |
| **DHRS4-AS1** | Up | 2.0 | 0.1 | 28 | 1 | Up | 0.8 | 0.1 | 58 | 20 |
| **CAMK2D** | Up | 2.6 | 0.0 | 154 | 4 | Up | 0.3 | 0.6 | 59 | 30 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **PTPN14** | Up | 2.8 | 0.0 | 301 | 7 | Up | 0.1 | 0.9 | 45 | 26 |
| **CCZ1** | Up | 1.5 | 0.3 | 19 | 1 | Up | 1.4 | 0.1 | 30 | 7 |
| **BNC1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.1 | 14 | 2 |
| **FPR3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.1 | 14 | 2 |
| **PIK3C3** | Up | 2.8 | 0.0 | 46 | 1 | Up | 0.1 | 0.9 | 21 | 12 |
| **CSTB** | Up | 1.3 | 0.1 | 61 | 4 | Up | 1.6 | 0.0 | 103 | 21 |
| **LOC100653236** | Up | 1.2 | 0.0 | 708 | 49 | Up | 1.6 | 0.0 | 294 | 58 |
| **BYSL** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.2 | 21 | 6 |
| **RBM15** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.2 | 21 | 6 |
| **ZNF576** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.2 | 21 | 6 |
| **HDGFRP3** | Up | 0.9 | 0.4 | 37 | 3 | Up | 1.9 | 0.0 | 128 | 21 |
| **GATA6** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.0 | 27 | 4 |
| **ATP5J2** | Up | 2.1 | 0.0 | 168 | 6 | Up | 0.7 | 0.1 | 66 | 25 |
| **FAM184B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.3 | 14 | 4 |
| **SCN2B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.3 | 14 | 4 |
| **BTBD6** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.1 | 0.9 | 35 | 20 |
| **GPR65** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.1 | 0.9 | 14 | 8 |
| **C14orf135** | Up | 1.6 | 0.1 | 39 | 2 | Up | 1.2 | 0.1 | 31 | 8 |
| **ATP2C2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.0 | 46 | 7 |
| **ZNF516** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.5 | 0.4 | 37 | 16 |
| **DAD1** | Up | 2.6 | 0.0 | 548 | 14 | Up | 0.2 | 0.8 | 46 | 25 |
| **C18orf56** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **O3FAR1** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **C21orf7** | Up | 1.9 | 0.2 | 25 | 1 | Up | 0.9 | 0.3 | 19 | 6 |
| **NDUFAF4** | Up | 1.6 | 0.1 | 39 | 2 | Up | 1.2 | 0.1 | 27 | 7 |
| **C16orf46** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **CHTF18** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **LOC100132356** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **LOC100505525** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.3 | 7 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC100506343** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **LOC595101** | Up | 0.8 | 0.7 | 1 | 0 | Up | 2.0 | 0.3 | 7 | 1 |
| **UHRF1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 2.8 | 0.0 | 23 | 2 |
| **C21orf49** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **PTCD2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **PLA2G16** | Up | 2.8 | 0.0 | 46 | 1 | Up | 0.1 | 1.0 | 27 | 16 |
| **ATOX1** | Up | 1.8 | 0.1 | 44 | 2 | Up | 1.1 | 0.1 | 44 | 13 |
| **ATP5L2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **FAM127C** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **LINC00327** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **LOC100130000** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **FAM120B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.0 | 0.3 | 17 | 5 |
| **ZNF83** | Up | 1.7 | 0.1 | 43 | 2 | Up | 1.1 | 0.1 | 31 | 9 |
| **DENND4A** | Up | 1.6 | 0.3 | 20 | 1 | Up | 1.2 | 0.4 | 8 | 2 |
| **LAMA4** | Up | 2.0 | 0.0 | 259 | 10 | Up | 0.7 | 0.1 | 87 | 32 |
| **SERPINB9** | Up | 2.6 | 0.0 | 334 | 9 | Up | 0.2 | 0.7 | 53 | 28 |
| **BACH2** | Up | 0.8 | 0.5 | 22 | 2 | Up | 2.0 | 0.0 | 27 | 4 |
| **TRAPPC2** | Up | 2.6 | 0.0 | 194 | 5 | Up | 0.2 | 0.8 | 31 | 17 |
| **C1orf31** | Up | 1.9 | 0.0 | 72 | 3 | Up | 0.9 | 0.3 | 21 | 7 |
| **TTLL5** | Up | 1.8 | 0.2 | 24 | 1 | Up | 1.0 | 0.3 | 16 | 5 |
| **TMEM104** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.0 | 0.3 | 20 | 6 |
| **ULK3** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.5 | 0.5 | 38 | 17 |
| **ZNF584** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **PHPT1** | Up | 2.7 | 0.0 | 84 | 2 | Up | 0.1 | 0.9 | 55 | 32 |
| **FUT4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.9 | 0.1 | 13 | 2 |
| **PTPDC1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.9 | 0.1 | 13 | 2 |
| **SATB2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.9 | 0.0 | 38 | 6 |
| **TNFAIP8L2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.9 | 0.1 | 13 | 2 |
| **CCDC149** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.4 | 0.6 | 20 | 9 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RBM12B** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.4 | 0.5 | 31 | 14 |
| **FLRT2** | Up | 2.5 | 0.0 | 38 | 1 | Up | 0.3 | 0.8 | 10 | 5 |
| **BCL7B** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.0 | 1.0 | 50 | 30 |
| **USP32P2** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.0 | 1.0 | 15 | 9 |
| **LOC100498859** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **SAMD14** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **ANXA5** | Up | 2.1 | 0.0 | 584 | 22 | Up | 0.7 | 0.1 | 98 | 38 |
| **GPR171** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LOC100652934** | Up | 2.7 | 0.4 | 4 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **ZSCAN12P1** | Up | 0.1 | 0.9 | 14 | 2 | Up | 2.6 | 0.1 | 11 | 1 |
| **LOC100505792** | Up | 2.1 | 0.1 | 29 | 1 | Up | 0.6 | 0.4 | 23 | 9 |
| **C17orf58** | Up | 2.3 | 0.1 | 34 | 1 | Up | 0.4 | 0.7 | 11 | 5 |
| **C3orf45** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.4 | 0.7 | 11 | 5 |
| **LOC100506860** | Up | 2.4 | 0.0 | 37 | 1 | Up | 0.3 | 0.7 | 32 | 16 |
| **JAK1** | Up | 2.5 | 0.0 | 294 | 8 | Up | 0.2 | 0.8 | 39 | 21 |
| **SH2B3** | Up | 1.7 | 0.0 | 81 | 4 | Up | 1.1 | 0.2 | 24 | 7 |
| **LOC100505938** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.9 | 0.0 | 25 | 4 |
| **TMEM100** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.9 | 0.0 | 25 | 4 |
| **SSR3** | Up | 2.1 | 0.0 | 628 | 23 | Up | 0.6 | 0.2 | 79 | 32 |
| **ZNF814** | Up | 2.3 | 0.0 | 66 | 2 | Up | 0.4 | 0.5 | 36 | 17 |
| **RAI2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.0 | 0.4 | 13 | 4 |
| **PKNOX1** | Up | 1.5 | 0.1 | 53 | 3 | Up | 1.3 | 0.0 | 51 | 13 |
| **KANSL1L** | Up | 1.2 | 0.4 | 16 | 1 | Up | 1.5 | 0.0 | 37 | 8 |
| **CHST1** | Up | 0.8 | 0.6 | 12 | 1 | Up | 1.9 | 0.0 | 37 | 6 |
| **PQLC2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.4 | 0.7 | 13 | 6 |
| **BTNL9** | Up | 1.8 | 0.6 | 2 | 0 | Up | 1.0 | 0.3 | 16 | 5 |
| **CRNKL1** | Up | 1.7 | 0.2 | 22 | 1 | Up | 1.0 | 0.3 | 20 | 6 |
| **ANKRD30BP2** | Up | 1.0 | 0.5 | 14 | 1 | Up | 1.7 | 0.1 | 16 | 3 |
| **C14orf102** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.4 | 0.7 | 15 | 7 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **NPTX2** | Up | 2.1 | 0.1 | 30 | 1 | Up | 0.6 | 0.5 | 17 | 7 |
| **TRIM7** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.4 | 0.7 | 17 | 8 |
| **CABLES1** | Up | 2.4 | 0.1 | 36 | 1 | Up | 0.3 | 0.7 | 26 | 13 |
| **EAF1** | Up | 2.5 | 0.0 | 251 | 7 | Up | 0.2 | 0.8 | 39 | 21 |
| **SKAP2** | Up | 2.7 | 0.0 | 365 | 9 | Up | 0.0 | 1.0 | 31 | 19 |
| **ZNF652** | Up | 2.0 | 0.0 | 147 | 6 | Up | 0.7 | 0.2 | 41 | 15 |
| **ARSB** | Up | 2.3 | 0.1 | 33 | 1 | Up | 0.4 | 0.6 | 26 | 12 |
| **FEM1A** | Up | 2.3 | 0.0 | 63 | 2 | Up | 0.4 | 0.5 | 37 | 17 |
| **TBL1XR1** | Up | 2.5 | 0.0 | 483 | 14 | Up | 0.2 | 0.6 | 74 | 39 |
| **PDZD8** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.9 | 0.0 | 30 | 5 |
| **ERH** | Up | 1.9 | 0.0 | 214 | 9 | Up | 0.8 | 0.1 | 58 | 21 |
| **SPHK1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 2.6 | 0.1 | 11 | 1 |
| **ZNF434** | Up | 0.8 | 0.6 | 12 | 1 | Up | 1.9 | 0.0 | 24 | 4 |
| **LOC644936** | Up | 2.4 | 0.1 | 36 | 1 | Up | 0.3 | 0.9 | 4 | 2 |
| **PFDN2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.9 | 0.1 | 40 | 13 |
| **PLS3** | Up | 1.7 | 0.0 | 398 | 19 | Up | 0.9 | 0.0 | 65 | 21 |
| **CCDC53** | Up | 1.7 | 0.1 | 42 | 2 | Up | 1.0 | 0.1 | 42 | 13 |
| **ProSAPiP1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.1 | 18 | 3 |
| **ATP5I** | Up | 2.1 | 0.0 | 164 | 6 | Up | 0.5 | 0.4 | 31 | 13 |
| **DLL1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.0 | 41 | 7 |
| **NUDT3** | Up | 0.8 | 0.3 | 75 | 7 | Up | 1.9 | 0.0 | 79 | 13 |
| **VMP1** | Up | 2.6 | 0.0 | 315 | 8 | Up | 0.0 | 1.0 | 67 | 41 |
| **GLTSCR1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **MAPK8** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **RHBDF2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **ZNF133** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.2 | 12 | 2 |
| **RNY3** | Up | 1.4 | 0.4 | 18 | 1 | Up | 1.2 | 0.4 | 8 | 2 |
| **MBD2** | Up | 1.2 | 0.2 | 44 | 3 | Up | 1.5 | 0.0 | 36 | 8 |
| **NR1D2** | Up | 1.9 | 0.2 | 25 | 1 | Up | 0.8 | 0.3 | 25 | 9 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ZC3HC1** | Up | 2.2 | 0.0 | 91 | 3 | Up | 0.4 | 0.7 | 17 | 8 |
| **GRIA3** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.9 | 0.3 | 24 | 8 |
| **MIR210HG** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.9 | 0.4 | 18 | 6 |
| **OTUD6A** | Up | 1.6 | 0.3 | 21 | 1 | Up | 1.0 | 0.5 | 10 | 3 |
| **SLC29A1** | Up | 1.3 | 0.3 | 31 | 2 | Up | 1.4 | 0.0 | 55 | 13 |
| **TRAM2** | Up | 1.6 | 0.1 | 59 | 3 | Up | 1.0 | 0.0 | 62 | 19 |
| **HIF1A** | Up | 1.5 | 0.0 | 230 | 13 | Up | 1.1 | 0.0 | 57 | 16 |
| **CEP55** | Up | 0.5 | 0.7 | 18 | 2 | Up | 2.1 | 0.1 | 15 | 2 |
| **BSN-AS2** | Up | 1.9 | 0.2 | 26 | 1 | Up | 0.7 | 0.4 | 21 | 8 |
| **TEFM** | Up | 1.7 | 0.1 | 41 | 2 | Up | 1.0 | 0.3 | 16 | 5 |
| **SLC26A7** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **USP6NL** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **ZNF813** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **IFI16** | Up | 2.1 | 0.0 | 162 | 6 | Up | 0.5 | 0.3 | 58 | 25 |
| **PLA2G4E** | Up | 0.4 | 0.8 | 9 | 1 | Up | 2.2 | 0.2 | 8 | 1 |
| **WDPCP** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.8 | 8 | 4 |
| **PAPSS1** | Up | 1.9 | 0.1 | 49 | 2 | Up | 0.7 | 0.3 | 42 | 16 |
| **ARSI** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **GREM2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100128130** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100507229** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LRRC38** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **MLLT4-AS1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **RPAIN** | Up | 1.8 | 0.0 | 65 | 3 | Up | 0.8 | 0.2 | 41 | 14 |
| **RPS16P5** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **IL12RB2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **LOC643770** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **MS4A2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **SPATS1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.3 | 6 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TECPR1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **ZNF211** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.8 | 0.3 | 6 | 1 |
| **MRPL20** | Up | 2.3 | 0.0 | 98 | 3 | Up | 0.2 | 0.8 | 27 | 14 |
| **XRRA1** | Up | 2.5 | 0.0 | 75 | 2 | Up | 0.1 | 1.0 | 17 | 10 |
| **MRPL17** | Up | 1.8 | 0.0 | 129 | 6 | Up | 0.8 | 0.3 | 26 | 9 |
| **BMP4** | Up | 0.3 | 0.7 | 24 | 3 | Up | 2.3 | 0.0 | 24 | 3 |
| **TTL** | Up | 2.2 | 0.1 | 31 | 1 | Up | 0.4 | 0.6 | 32 | 15 |
| **CYP11B1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **DKFZp686O1327** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **ENO4** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **LOC100653131** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **LOC647012** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **MESTIT1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **P2RY2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **RAET1K** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **ZDHHC8P1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **ZNF708** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **ZSWIM5** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **PNMAL1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.3 | 26 | 9 |
| **SLC30A7** | Up | 2.3 | 0.0 | 251 | 8 | Up | 0.3 | 0.7 | 35 | 18 |
| **DHX33** | Up | 1.9 | 0.0 | 73 | 3 | Up | 0.6 | 0.4 | 28 | 11 |
| **CYYR1** | Up | 1.6 | 0.3 | 21 | 1 | Up | 0.9 | 0.3 | 25 | 8 |
| **RARA** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.2 | 0.8 | 25 | 13 |
| **TNFAIP8L1** | Up | 2.5 | 0.0 | 257 | 7 | Up | 0.0 | 1.0 | 41 | 25 |
| **TMEM80** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.4 | 20 | 7 |
| **CEP135** | Up | 1.0 | 0.5 | 14 | 1 | Up | 1.5 | 0.5 | 5 | 1 |
| **GOLGA8DP** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **HCG9** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC100505719** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.2 | 0.9 | 2 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC100506544** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC285889** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **RPL13AP20** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **WFDC8** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **UQCR10** | Up | 2.5 | 0.0 | 598 | 17 | Up | 0.1 | 0.9 | 32 | 19 |
| **CALU** | Up | 2.0 | 0.0 | 1044 | 42 | Up | 0.6 | 0.1 | 107 | 45 |
| **ARL5B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **C17orf107** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **INTS3** | Up | 1.8 | 0.2 | 23 | 1 | Up | 0.8 | 0.1 | 51 | 18 |
| **KLHL22** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.1 | 51 | 18 |
| **LOC100505971** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LOC286359** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **ZNF80** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **ADAT2** | Up | 1.3 | 0.3 | 31 | 2 | Up | 1.3 | 0.1 | 36 | 9 |
| **USP4** | Up | 1.1 | 0.1 | 69 | 5 | Up | 1.4 | 0.0 | 70 | 16 |
| **LOC283177** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.4 | 17 | 6 |
| **RMI2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.4 | 17 | 6 |
| **MGC27345** | Up | 2.3 | 0.0 | 64 | 2 | Up | 0.2 | 0.8 | 23 | 12 |
| **LOC729852** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.2 | 0.8 | 17 | 9 |
| **EXOC8** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **IGSF1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **RUNDC3B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.7 | 0.2 | 11 | 2 |
| **ZNF124** | Up | 1.8 | 0.2 | 24 | 1 | Up | 0.7 | 0.5 | 16 | 6 |
| **ACLY** | Up | 1.8 | 0.0 | 153 | 7 | Up | 0.7 | 0.1 | 67 | 25 |
| **MYOZ3** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.8 | 0.5 | 14 | 5 |
| **ZNF829** | Up | 1.6 | 0.3 | 20 | 1 | Up | 1.0 | 0.3 | 16 | 5 |
| **BGN** | Up | 1.0 | 0.1 | 88 | 7 | Up | 1.5 | 0.0 | 140 | 30 |
| **RANBP10** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.7 | 0.0 | 32 | 6 |
| **HNRNPA1L2** | Up | 0.0 | 1.0 | 19 | 3 | Up | 2.5 | 0.0 | 95 | 10 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ZC3HAV1** | Up | 2.5 | 0.0 | 277 | 8 | Up | 0.0 | 0.9 | 67 | 40 |
| **RPAP1** | Up | 1.5 | 0.3 | 19 | 1 | Up | 1.0 | 0.3 | 20 | 6 |
| **PHF14** | Up | 2.3 | 0.1 | 34 | 1 | Up | 0.2 | 0.8 | 24 | 13 |
| **MLX** | Up | 1.9 | 0.1 | 47 | 2 | Up | 0.6 | 0.2 | 51 | 20 |
| **ZNF626** | Up | 1.6 | 0.3 | 21 | 1 | Up | 0.9 | 0.3 | 21 | 7 |
| **JAZF1** | Up | 1.2 | 0.4 | 16 | 1 | Up | 1.3 | 0.3 | 12 | 3 |
| **RUFY3** | Up | 2.5 | 0.0 | 140 | 4 | Up | 0.0 | 0.9 | 65 | 39 |
| **PDP1** | Up | 1.8 | 0.0 | 69 | 3 | Up | 0.6 | 0.4 | 28 | 11 |
| **APITD1-CORT** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.7 | 0.4 | 19 | 7 |
| **LCP2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **TMEM143** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **JAG1** | Up | 0.5 | 0.5 | 55 | 6 | Up | 2.0 | 0.0 | 126 | 20 |
| **MTMR7** | Up | 0.9 | 0.6 | 13 | 1 | Up | 1.5 | 0.1 | 24 | 5 |
| **LOC100653334** | Up | 1.7 | 0.2 | 22 | 1 | Up | 0.8 | 0.4 | 17 | 6 |
| **MEF2C** | Up | 1.4 | 0.2 | 35 | 2 | Up | 1.1 | 0.0 | 81 | 24 |
| **CENPK** | Up | 0.6 | 0.4 | 83 | 9 | Up | 1.9 | 0.1 | 19 | 3 |
| **OPTN** | Up | 2.1 | 0.0 | 223 | 8 | Up | 0.3 | 0.5 | 67 | 33 |
| **ZFP64** | Up | 1.3 | 0.2 | 32 | 2 | Up | 1.2 | 0.1 | 37 | 10 |
| **LOC100132832** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.6 | 0.0 | 36 | 7 |
| **SEC11C** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.1 | 0.9 | 27 | 15 |
| **WDR55** | Up | 1.9 | 0.1 | 47 | 2 | Up | 0.6 | 0.3 | 47 | 19 |
| **CRCP** | Up | 1.8 | 0.2 | 24 | 1 | Up | 0.6 | 0.4 | 23 | 9 |
| **RABL2A** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.7 | 0.5 | 16 | 6 |
| **DNMBP** | Up | 1.7 | 0.2 | 22 | 1 | Up | 0.8 | 0.3 | 25 | 9 |
| **EPHB2** | Up | 0.7 | 0.7 | 11 | 1 | Up | 1.8 | 0.0 | 50 | 9 |
| **LOC100287813** | Up | 2.2 | 0.1 | 31 | 1 | Up | 0.3 | 0.9 | 4 | 2 |
| **CHIC1** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.1 | 0.9 | 9 | 5 |
| **DDX31** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.1 | 0.9 | 9 | 5 |
| **ZNF674** | Up | 2.3 | 0.1 | 34 | 1 | Up | 0.1 | 0.9 | 9 | 5 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CRX** | Up | 1.8 | 0.0 | 108 | 5 | Up | 0.7 | 0.1 | 91 | 35 |
| **RNF44** | Up | 0.0 | 1.0 | 13 | 2 | Up | 2.4 | 0.0 | 36 | 4 |
| **MRPL51** | Up | 2.1 | 0.0 | 168 | 6 | Up | 0.3 | 0.8 | 20 | 10 |
| **POMT2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.1 | 0.9 | 32 | 18 |
| **SIGLEC8** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **CDC42SE2** | Up | 1.5 | 0.0 | 110 | 6 | Up | 0.9 | 0.1 | 55 | 18 |
| **VAMP5** | Up | 2.4 | 0.1 | 36 | 1 | Up | 0.0 | 1.0 | 15 | 9 |
| **LOC100506455** | Up | 2.3 | 0.0 | 97 | 3 | Up | 0.1 | 0.9 | 26 | 15 |
| **ZNF252P** | Up | 2.4 | 0.0 | 101 | 3 | Up | 0.0 | 1.0 | 15 | 9 |
| **C16orf62** | Up | 1.7 | 0.0 | 62 | 3 | Up | 0.7 | 0.2 | 41 | 15 |
| **HNF1A-AS1** | Up | 1.6 | 0.3 | 21 | 1 | Up | 0.8 | 0.4 | 20 | 7 |
| **RPL35** | Up | 1.3 | 0.0 | 387 | 26 | Up | 1.2 | 0.0 | 128 | 35 |
| **NAIF1** | Up | 1.2 | 0.4 | 16 | 1 | Up | 1.2 | 0.1 | 30 | 8 |
| **LOC100506201** | Up | 1.9 | 0.2 | 25 | 1 | Up | 0.5 | 0.4 | 31 | 13 |
| **DISC1** | Up | 1.8 | 0.2 | 23 | 1 | Up | 0.7 | 0.5 | 13 | 5 |
| **RPS6KA4** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.7 | 0.3 | 31 | 12 |
| **THTPA** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.7 | 0.3 | 31 | 12 |
| **BUB3** | Up | 1.7 | 0.0 | 354 | 18 | Up | 0.8 | 0.1 | 69 | 25 |
| **MTOR** | Up | 1.2 | 0.4 | 16 | 1 | Up | 1.2 | 0.1 | 26 | 7 |
| **ADAT3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.6 | 0.1 | 20 | 4 |
| **PINX1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.6 | 0.1 | 20 | 4 |
| **TCEB2** | Up | 2.2 | 0.0 | 146 | 5 | Up | 0.2 | 0.7 | 56 | 30 |
| **ECD** | Up | 2.3 | 0.1 | 34 | 1 | Up | 0.1 | 0.9 | 26 | 15 |
| **MGC16121** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **ZBTB10** | Up | 1.4 | 0.4 | 18 | 1 | Up | 1.0 | 0.5 | 10 | 3 |
| **ADAMTS7** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.6 | 0.2 | 15 | 3 |
| **SVOP** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.6 | 0.2 | 15 | 3 |
| **LAMB1** | Up | 2.0 | 0.0 | 272 | 11 | Up | 0.4 | 0.5 | 39 | 18 |
| **NRAS** | Up | 2.0 | 0.0 | 78 | 3 | Up | 0.4 | 0.5 | 36 | 17 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MTMR12** | Up | 2.1 | 0.0 | 54 | 2 | Up | 0.3 | 0.5 | 60 | 29 |
| **COX6B1** | Up | 2.2 | 0.0 | 199 | 7 | Up | 0.2 | 0.7 | 62 | 33 |
| **NDUFA4** | Up | 2.3 | 0.0 | 590 | 19 | Up | 0.1 | 0.9 | 87 | 51 |
| **PRPF40A** | Up | 2.0 | 0.0 | 124 | 5 | Up | 0.4 | 0.4 | 59 | 27 |
| **ITGB1BP1** | Up | 1.6 | 0.3 | 20 | 1 | Up | 0.8 | 0.2 | 35 | 12 |
| **RAP2A** | Up | 1.5 | 0.0 | 87 | 5 | Up | 0.9 | 0.1 | 59 | 19 |
| **ZWILCH** | Up | 1.3 | 0.2 | 33 | 2 | Up | 1.0 | 0.3 | 17 | 5 |
| **LOC100128531** | Up | 1.1 | 0.5 | 15 | 1 | Up | 1.2 | 0.4 | 8 | 2 |
| **DNM1P46** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.6 | 0.3 | 10 | 2 |
| **MEX3B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.6 | 0.3 | 10 | 2 |
| **RASL10A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.6 | 0.3 | 10 | 2 |
| **CEP89** | Up | 1.2 | 0.4 | 16 | 1 | Up | 1.1 | 0.4 | 11 | 3 |
| **FAM78A** | Up | 0.2 | 0.9 | 8 | 1 | Up | 2.1 | 0.0 | 22 | 3 |
| **NUCKS1** | Up | 2.4 | 0.0 | 1221 | 38 | Up | 0.0 | 1.0 | 148 | 90 |
| **SELK** | Up | 1.9 | 0.0 | 97 | 4 | Up | 0.4 | 0.5 | 44 | 20 |
| **GKAP1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.6 | 0.5 | 15 | 6 |
| **CDKN2D** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.1 | 24 | 5 |
| **MRPL47** | Up | 2.2 | 0.0 | 58 | 2 | Up | 0.2 | 0.9 | 15 | 8 |
| **LMLN** | Up | 2.2 | 0.1 | 32 | 1 | Up | 0.1 | 0.9 | 23 | 13 |
| **TEKT4P2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **MRPL27** | Up | 1.6 | 0.0 | 149 | 8 | Up | 0.8 | 0.2 | 34 | 12 |
| **EFTUD1** | Up | 1.5 | 0.3 | 19 | 1 | Up | 0.9 | 0.4 | 18 | 6 |
| **SRGAP1** | Up | 0.9 | 0.5 | 24 | 2 | Up | 1.5 | 0.0 | 41 | 9 |
| **WHSC1** | Up | 0.0 | 1.0 | 38 | 6 | Up | 2.4 | 0.0 | 100 | 12 |
| **FAM126A** | Up | 1.7 | 0.1 | 42 | 2 | Up | 0.7 | 0.5 | 13 | 5 |
| **ZNF777** | Up | 0.9 | 0.6 | 13 | 1 | Up | 1.4 | 0.0 | 48 | 11 |
| **ISLR2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.1 | 19 | 4 |
| **PLEKHG1** | Up | 0.8 | 0.6 | 12 | 1 | Up | 1.5 | 0.1 | 19 | 4 |
| **LOC100505743** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.0 | 1.0 | 10 | 6 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC100506504** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **NCRNA00118** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **RNU6-2** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **TRIM52** | Up | 2.3 | 0.5 | 3 | 0 | Up | 0.0 | 1.0 | 10 | 6 |
| **HNRNPK** | Up | 1.9 | 0.0 | 1081 | 46 | Up | 0.4 | 0.1 | 172 | 79 |
| **CDKL5** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **HOXA2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **LOC100506855** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **PCBP1-AS1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **SPAG4** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **UQCRH** | Up | 1.6 | 0.0 | 113 | 6 | Up | 0.8 | 0.1 | 72 | 26 |
| **LINC00341** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **LOC100129213** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **LOC100506462** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **LOC440742** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **LUZP2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **MAFG-AS1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **MX2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **PCDHB19P** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **STARD8** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **USP35** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.5 | 5 | 1 |
| **BIRC5** | Up | 0.1 | 0.8 | 107 | 16 | Up | 2.2 | 0.0 | 39 | 5 |
| **FAM214B** | Up | 1.3 | 0.4 | 17 | 1 | Up | 1.0 | 0.1 | 36 | 11 |
| **C17orf69** | Up | 1.0 | 0.5 | 14 | 1 | Up | 1.3 | 0.2 | 20 | 5 |
| **APBB2** | Up | 0.8 | 0.5 | 33 | 3 | Up | 1.5 | 0.0 | 62 | 13 |
| **ADCY9** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.6 | 0.5 | 17 | 7 |
| **LOC100652902** | Up | 1.5 | 0.2 | 36 | 2 | Up | 0.9 | 0.4 | 15 | 5 |
| **KIAA0408** | Up | 0.9 | 0.6 | 13 | 1 | Up | 1.4 | 0.0 | 43 | 10 |
| **FDPSL2A** | Up | 2.0 | 0.0 | 105 | 4 | Up | 0.3 | 0.6 | 63 | 32 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **BTF3L4** | Up | 2.1 | 0.0 | 135 | 5 | Up | 0.2 | 0.7 | 40 | 21 |
| **NPTXR** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.6 | 0.3 | 41 | 17 |
| **TMCO3** | Up | 1.6 | 0.0 | 116 | 6 | Up | 0.7 | 0.5 | 16 | 6 |
| **TSPAN3** | Up | 1.1 | 0.1 | 93 | 7 | Up | 1.2 | 0.0 | 150 | 39 |
| **EXOC3L2** | Up | 2.1 | 0.0 | 55 | 2 | Up | 0.2 | 0.8 | 23 | 12 |
| **ZNF117** | Up | 1.9 | 0.2 | 26 | 1 | Up | 0.4 | 0.7 | 19 | 9 |
| **TRAF3IP2-AS1** | Up | 1.8 | 0.0 | 68 | 3 | Up | 0.5 | 0.5 | 32 | 14 |
| **ARPC3** | Up | 1.8 | 0.0 | 220 | 10 | Up | 0.5 | 0.1 | 119 | 52 |
| **GLT8D1** | Up | 1.4 | 0.2 | 35 | 2 | Up | 0.9 | 0.1 | 45 | 15 |
| **GRAMD4** | Up | 1.0 | 0.5 | 14 | 1 | Up | 1.3 | 0.0 | 55 | 14 |
| **LOC100130219** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.2 | 14 | 3 |
| **ZNF319** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.2 | 14 | 3 |
| **TIMM10** | Up | 0.5 | 0.7 | 19 | 2 | Up | 1.8 | 0.0 | 28 | 5 |
| **ACTN2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.5 | 0.0 | 32 | 7 |
| **POLR3E** | Up | 0.8 | 0.4 | 34 | 3 | Up | 1.5 | 0.0 | 41 | 9 |
| **KLHL6** | Up | 1.6 | 0.3 | 20 | 1 | Up | 0.7 | 0.5 | 11 | 4 |
| **C19orf53** | Up | 1.5 | 0.0 | 92 | 5 | Up | 0.8 | 0.1 | 55 | 20 |
| **CNNM3** | Up | 1.5 | 0.2 | 37 | 2 | Up | 0.8 | 0.1 | 59 | 21 |
| **SNW1** | Up | 1.3 | 0.0 | 156 | 10 | Up | 1.0 | 0.1 | 48 | 15 |
| **ZDHHC13** | Up | 1.2 | 0.4 | 16 | 1 | Up | 1.1 | 0.5 | 7 | 2 |
| **SMAP1** | Up | 1.9 | 0.1 | 49 | 2 | Up | 0.4 | 0.5 | 59 | 28 |
| **NCBP2** | Up | 1.1 | 0.1 | 70 | 5 | Up | 1.1 | 0.0 | 54 | 15 |
| **SKA2** | Up | 2.2 | 0.0 | 298 | 10 | Up | 0.0 | 1.0 | 25 | 15 |
| **TMEM41A** | Up | 2.0 | 0.1 | 27 | 1 | Up | 0.3 | 0.7 | 30 | 15 |
| **ZNF260** | Up | 1.0 | 0.4 | 26 | 2 | Up | 1.3 | 0.2 | 16 | 4 |
| **AASDH** | Up | 0.7 | 0.7 | 11 | 1 | Up | 1.6 | 0.2 | 15 | 3 |
| **MRPL32** | Up | 2.2 | 0.0 | 89 | 3 | Up | 0.1 | 1.0 | 17 | 10 |
| **RCN2** | Up | 1.9 | 0.0 | 210 | 9 | Up | 0.4 | 0.5 | 57 | 27 |
| **CLDN15** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.5 | 0.6 | 14 | 6 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPSB1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.5 | 0.5 | 21 | 9 |
| **DNAJA2** | Up | 1.4 | 0.0 | 203 | 12 | Up | 0.8 | 0.1 | 61 | 21 |
| **OGT** | Up | 1.6 | 0.0 | 132 | 7 | Up | 0.7 | 0.1 | 78 | 30 |
| **C12orf35** | Up | 0.9 | 0.2 | 72 | 6 | Up | 1.3 | 0.1 | 29 | 7 |
| **CFI** | Up | 0.7 | 0.6 | 21 | 2 | Up | 1.6 | 0.0 | 168 | 35 |
| **ICAM2** | Up | 1.9 | 0.1 | 47 | 2 | Up | 0.4 | 0.6 | 32 | 15 |
| **MAFB** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.5 | 0.5 | 23 | 10 |
| **PRDM16** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **WDR53** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **TAOK1** | Up | 1.6 | 0.0 | 111 | 6 | Up | 0.7 | 0.2 | 58 | 22 |
| **TAL1** | Up | 0.5 | 0.7 | 18 | 2 | Up | 1.8 | 0.3 | 6 | 1 |
| **CWC15** | Up | 2.0 | 0.0 | 79 | 3 | Up | 0.2 | 0.7 | 62 | 33 |
| **VCL** | Up | 1.9 | 0.0 | 706 | 30 | Up | 0.3 | 0.3 | 129 | 63 |
| **UBE2L3** | Up | 2.0 | 0.0 | 325 | 13 | Up | 0.2 | 0.4 | 137 | 71 |
| **SUPT7L** | Up | 1.8 | 0.1 | 45 | 2 | Up | 0.5 | 0.3 | 60 | 27 |
| **RRP7B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.5 | 0.6 | 16 | 7 |
| **FAM18A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **GJD3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **LOC441179** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **LOC727849** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **SLC24A5** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **SRL** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.3 | 9 | 2 |
| **ZEB1-AS1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 2.2 | 0.2 | 8 | 1 |
| **TSHZ2** | Up | 1.9 | 0.2 | 25 | 1 | Up | 0.4 | 0.6 | 27 | 13 |
| **GPR155** | Up | 1.3 | 0.1 | 48 | 3 | Up | 0.9 | 0.1 | 52 | 17 |
| **MRPS21** | Up | 1.2 | 0.1 | 99 | 7 | Up | 1.1 | 0.0 | 58 | 17 |
| **ANO6** | Up | 1.5 | 0.1 | 70 | 4 | Up | 0.8 | 0.2 | 44 | 16 |
| **PDIA5** | Up | 1.3 | 0.2 | 33 | 2 | Up | 0.9 | 0.3 | 27 | 9 |
| **PEX1** | Up | 0.2 | 0.9 | 8 | 1 | Up | 2.0 | 0.0 | 26 | 4 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **STK4-AS1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.5 | 0.7 | 9 | 4 |
| **EIF4E2** | Up | 1.9 | 0.0 | 119 | 5 | Up | 0.3 | 0.7 | 24 | 12 |
| **LOC100505717** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.3 | 13 | 3 |
| **LRFN4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.3 | 13 | 3 |
| **TRIM15** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.3 | 13 | 3 |
| **RNF34** | Up | 2.1 | 0.0 | 54 | 2 | Up | 0.1 | 0.9 | 27 | 15 |
| **NRIP3** | Up | 1.9 | 0.1 | 49 | 2 | Up | 0.3 | 0.8 | 10 | 5 |
| **RPL13AP5** | Up | 1.6 | 0.0 | 93 | 5 | Up | 0.6 | 0.2 | 71 | 28 |
| **DPYSL4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.1 | 34 | 8 |
| **CCND2** | Up | 0.8 | 0.0 | 209 | 19 | Up | 1.4 | 0.0 | 144 | 34 |
| **C1orf123** | Up | 1.6 | 0.3 | 21 | 1 | Up | 0.6 | 0.3 | 48 | 20 |
| **CTSZ** | Up | 1.3 | 0.1 | 76 | 5 | Up | 0.9 | 0.0 | 80 | 26 |
| **ATXN7L2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.4 | 0.2 | 17 | 4 |
| **SCPEP1** | Up | 2.1 | 0.0 | 82 | 3 | Up | 0.1 | 0.9 | 26 | 15 |
| **HIP1** | Up | 1.9 | 0.0 | 73 | 3 | Up | 0.3 | 0.7 | 41 | 21 |
| **C1orf52** | Up | 1.0 | 0.5 | 14 | 1 | Up | 1.1 | 0.4 | 11 | 3 |
| **ELK4** | Up | 1.9 | 0.0 | 116 | 5 | Up | 0.3 | 0.5 | 78 | 39 |
| **HMCN1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.4 | 0.7 | 11 | 5 |
| **TMEM169** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.4 | 0.7 | 11 | 5 |
| **MRPL21** | Up | 1.4 | 0.2 | 35 | 2 | Up | 0.8 | 0.3 | 33 | 12 |
| **ATP11A** | Up | 0.2 | 0.9 | 8 | 1 | Up | 1.9 | 0.0 | 81 | 13 |
| **VDAC3** | Up | 1.5 | 0.0 | 181 | 10 | Up | 0.6 | 0.1 | 76 | 30 |
| **B4GALT1** | Up | 1.9 | 0.0 | 214 | 9 | Up | 0.2 | 0.6 | 65 | 34 |
| **FDX1L** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.4 | 0.7 | 13 | 6 |
| **FLJ10038** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.3 | 0.1 | 29 | 7 |
| **SEL1L3** | Up | 1.7 | 0.0 | 85 | 4 | Up | 0.4 | 0.4 | 73 | 34 |
| **PTGR1** | Up | 2.1 | 0.0 | 54 | 2 | Up | 0.1 | 0.9 | 26 | 15 |
| **NID1** | Up | 2.0 | 0.0 | 124 | 5 | Up | 0.2 | 0.8 | 46 | 25 |
| **LOC100294033** | Up | 1.5 | 0.0 | 104 | 6 | Up | 0.7 | 0.2 | 47 | 18 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **PITPNB** | Up | 1.2 | 0.2 | 43 | 3 | Up | 1.0 | 0.4 | 13 | 4 |
| **LOC100505471** | Up | 1.1 | 0.4 | 27 | 2 | Up | 1.1 | 0.3 | 14 | 4 |
| **KLF3** | Up | 1.0 | 0.2 | 63 | 5 | Up | 1.1 | 0.0 | 65 | 18 |
| **TCF12** | Up | 0.8 | 0.4 | 34 | 3 | Up | 1.3 | 0.0 | 61 | 15 |
| **TAF15** | Up | 0.7 | 0.7 | 11 | 1 | Up | 1.4 | 0.0 | 40 | 9 |
| **JRK** | Up | 1.6 | 0.3 | 21 | 1 | Up | 0.5 | 0.5 | 30 | 13 |
| **PALM2** | Up | 0.9 | 0.6 | 13 | 1 | Up | 1.2 | 0.3 | 15 | 4 |
| **DTX3L** | Up | 1.9 | 0.0 | 185 | 8 | Up | 0.2 | 0.7 | 42 | 22 |
| **ETV6** | Up | 1.8 | 0.0 | 108 | 5 | Up | 0.3 | 0.5 | 47 | 23 |
| **LRRC8C** | Up | 1.7 | 0.1 | 43 | 2 | Up | 0.4 | 0.7 | 17 | 8 |
| **ATP5G1** | Up | 1.3 | 0.0 | 188 | 12 | Up | 0.8 | 0.1 | 56 | 20 |
| **CKS1B** | Up | 1.0 | 0.1 | 77 | 6 | Up | 1.1 | 0.0 | 69 | 20 |
| **ARPC5** | Up | 0.9 | 0.1 | 108 | 9 | Up | 1.2 | 0.0 | 110 | 30 |
| **AP3B2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.3 | 0.2 | 20 | 5 |
| **LOC284889** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.3 | 0.2 | 20 | 5 |
| **MKS1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.3 | 0.2 | 20 | 5 |
| **SLC25A22** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.6 | 33 | 16 |
| **DAB2IP** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.6 | 39 | 19 |
| **LIMS2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.5 | 47 | 23 |
| **MTERF** | Up | 1.7 | 0.2 | 22 | 1 | Up | 0.4 | 0.7 | 15 | 7 |
| **COMMD6** | Up | 1.6 | 0.0 | 94 | 5 | Up | 0.5 | 0.4 | 35 | 15 |
| **RPL7L1** | Up | 1.4 | 0.0 | 100 | 6 | Up | 0.7 | 0.4 | 21 | 8 |
| **FAM57A** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.9 | 0.3 | 22 | 7 |
| **CKAP2** | Up | 0.9 | 0.2 | 61 | 5 | Up | 1.1 | 0.1 | 29 | 8 |
| **MB21D2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.3 | 0.3 | 12 | 3 |
| **WDR81** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.3 | 0.3 | 12 | 3 |
| **DYNC1I2** | Up | 2.0 | 0.0 | 334 | 13 | Up | 0.1 | 0.9 | 59 | 35 |
| **CREB3L2** | Up | 2.0 | 0.1 | 28 | 1 | Up | 0.0 | 0.9 | 37 | 22 |
| **KLHDC10** | Up | 1.7 | 0.2 | 22 | 1 | Up | 0.4 | 0.5 | 51 | 24 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ODZ3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.3 | 0.0 | 43 | 11 |
| **SEPW1** | Up | 1.5 | 0.0 | 87 | 5 | Up | 0.6 | 0.1 | 92 | 37 |
| **PAQR8** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.7 | 0.2 | 49 | 19 |
| **ABCB6** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.1 | 31 | 8 |
| **GPR12** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **HCG4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **LOC100270804** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.4 | 8 | 2 |
| **CRK** | Up | 2.0 | 0.0 | 230 | 9 | Up | 0.0 | 1.0 | 20 | 12 |
| **SNX13** | Up | 1.7 | 0.2 | 22 | 1 | Up | 0.4 | 0.7 | 21 | 10 |
| **FILIP1L** | Up | 0.4 | 0.6 | 42 | 5 | Up | 1.7 | 0.1 | 26 | 5 |
| **AK8** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 12 | 6 |
| **FGF9** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 18 | 9 |
| **LOC145783** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 20 | 10 |
| **PHF16** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 12 | 6 |
| **ZNF789** | Up | 0.7 | 0.7 | 11 | 1 | Up | 1.4 | 0.2 | 21 | 5 |
| **ARMC2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 10 | 5 |
| **LCA5L** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 10 | 5 |
| **LOC150622** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 8 | 4 |
| **LOC727924** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 10 | 5 |
| **TMEM161B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 10 | 5 |
| **TRDN** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.8 | 10 | 5 |
| **PIK3C2B** | Up | 1.3 | 0.3 | 31 | 2 | Up | 0.8 | 0.2 | 42 | 15 |
| **CAMK1D** | Up | 0.2 | 0.9 | 8 | 1 | Up | 1.8 | 0.1 | 23 | 4 |
| **BCDIN3D** | Up | 0.2 | 0.8 | 29 | 4 | Up | 1.8 | 0.1 | 18 | 3 |
| **SDK2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.1 | 38 | 10 |
| **SYCP3** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **ZFP91** | Up | 1.4 | 0.0 | 102 | 6 | Up | 0.6 | 0.1 | 84 | 34 |
| **SAMD8** | Up | 1.4 | 0.1 | 68 | 4 | Up | 0.6 | 0.3 | 35 | 14 |
| **C1orf54** | Up | 1.3 | 0.4 | 17 | 1 | Up | 0.7 | 0.5 | 16 | 6 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ADRA1B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **BSND** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **C17orf72** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **FAM168A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **FLJ45079** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **INTU** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **LINC00256B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **LOC100506762** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **LOC100506957** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **LOC100507050** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **LOC100509023** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **LOC729400** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **NUDT17** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **PAN3-AS1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **PTCHD1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **RPS26P11** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **STAG3L1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.6 | 4 | 1 |
| **CD96** | Up | 0.8 | 0.5 | 22 | 2 | Up | 1.3 | 0.3 | 12 | 3 |
| **STAB1** | Up | 0.4 | 0.8 | 9 | 1 | Up | 1.6 | 0.0 | 45 | 9 |
| **DIS3L** | Up | 1.8 | 0.2 | 24 | 1 | Up | 0.2 | 0.9 | 15 | 8 |
| **LOC151475** | Up | 0.9 | 0.6 | 13 | 1 | Up | 1.1 | 0.3 | 14 | 4 |
| **SAP18** | Up | 1.9 | 0.0 | 168 | 7 | Up | 0.1 | 0.8 | 78 | 45 |
| **ECT2L** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **FLJ40852** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **LINC00204B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **NDUFA8** | Up | 1.8 | 0.2 | 23 | 1 | Up | 0.3 | 0.7 | 39 | 20 |
| **ZNF93** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **PPP1R2** | Up | 1.7 | 0.1 | 42 | 2 | Up | 0.3 | 0.6 | 45 | 22 |
| **CIAPIN1** | Up | 1.2 | 0.0 | 119 | 8 | Up | 0.8 | 0.1 | 53 | 19 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **FAM18B2** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.9 | 0.4 | 18 | 6 |
| **HEATR5B** | Up | 0.8 | 0.6 | 12 | 1 | Up | 1.2 | 0.1 | 30 | 8 |
| **POLM** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.1 | 30 | 8 |
| **TSHZ1** | Up | 0.6 | 0.6 | 20 | 2 | Up | 1.4 | 0.1 | 26 | 6 |
| **ANKRD36** | Up | 0.2 | 0.9 | 8 | 1 | Up | 1.8 | 0.3 | 6 | 1 |
| **LOC100506844** | Up | 1.9 | 0.2 | 25 | 1 | Up | 0.1 | 0.9 | 9 | 5 |
| **FCGR2A** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.3 | 0.7 | 33 | 17 |
| **C11orf74** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.6 | 0.6 | 10 | 4 |
| **JKAMP** | Up | 1.4 | 0.0 | 97 | 6 | Up | 0.7 | 0.3 | 36 | 14 |
| **IFI27** | Up | 1.3 | 0.0 | 166 | 11 | Up | 0.7 | 0.1 | 71 | 26 |
| **ARHGAP11A** | Up | 1.2 | 0.3 | 29 | 2 | Up | 0.9 | 0.5 | 9 | 3 |
| **GSDMB** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.3 | 15 | 4 |
| **HPCA** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.3 | 15 | 4 |
| **POLR3K** | Up | 0.6 | 0.6 | 20 | 2 | Up | 1.4 | 0.3 | 13 | 3 |
| **SCAF11** | Up | 2.0 | 0.0 | 219 | 9 | Up | 0.0 | 0.9 | 72 | 43 |
| **EML1** | Up | 1.5 | 0.3 | 19 | 1 | Up | 0.5 | 0.5 | 21 | 9 |
| **PSMB3** | Up | 1.5 | 0.0 | 173 | 10 | Up | 0.5 | 0.3 | 54 | 23 |
| **GTF2H2** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.9 | 0.1 | 13 | 2 |
| **ZNF700** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.9 | 0.1 | 13 | 2 |
| **C17orf65** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.9 | 0.5 | 9 | 3 |
| **ACRC** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **BDNF-AS** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **ERO1LB** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.8 | 23 | 12 |
| **GTF2IRD2P1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC100507554** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC100652769** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC100653284** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC256021** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LSM11** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MGC3771** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **STOML3** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **SYT9** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **SARNP** | Up | 1.4 | 0.0 | 271 | 16 | Up | 0.6 | 0.3 | 55 | 23 |
| **RPN2** | Up | 1.1 | 0.0 | 359 | 26 | Up | 0.8 | 0.0 | 114 | 39 |
| **AFAP1** | Up | 0.9 | 0.4 | 25 | 2 | Up | 1.0 | 0.2 | 27 | 8 |
| **MTMR2** | Up | 0.4 | 0.6 | 51 | 6 | Up | 1.6 | 0.0 | 29 | 6 |
| **WDR35** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.8 | 19 | 10 |
| **PCBP2** | Up | 1.4 | 0.0 | 369 | 22 | Up | 0.6 | 0.1 | 138 | 58 |
| **DDR2** | Up | 0.6 | 0.7 | 10 | 1 | Up | 1.4 | 0.3 | 9 | 2 |
| **HERC4** | Up | 0.5 | 0.6 | 36 | 4 | Up | 1.5 | 0.0 | 32 | 7 |
| **PHACTR3** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.9 | 0.1 | 19 | 3 |
| **FCHSD2** | Up | 1.4 | 0.2 | 34 | 2 | Up | 0.6 | 0.3 | 49 | 20 |
| **C9orf16** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.2 | 22 | 6 |
| **EBF3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.2 | 0.2 | 22 | 6 |
| **LPIN3** | Up | 1.9 | 0.1 | 49 | 2 | Up | 0.1 | 1.0 | 22 | 13 |
| **ACP1** | Up | 1.9 | 0.0 | 71 | 3 | Up | 0.1 | 0.9 | 57 | 33 |
| **CSNK2A1** | Up | 1.4 | 0.1 | 69 | 4 | Up | 0.5 | 0.3 | 54 | 23 |
| **TXLNA** | Up | 1.4 | 0.1 | 52 | 3 | Up | 0.5 | 0.3 | 47 | 20 |
| **FXR1** | Up | 1.1 | 0.1 | 96 | 7 | Up | 0.8 | 0.1 | 70 | 24 |
| **SHROOM4** | Up | 0.9 | 0.4 | 25 | 2 | Up | 1.0 | 0.3 | 20 | 6 |
| **ART3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.4 | 11 | 3 |
| **RFXAP** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.4 | 11 | 3 |
| **LIMS3** | Up | 1.9 | 0.2 | 26 | 1 | Up | 0.0 | 1.0 | 5 | 3 |
| **COLEC12** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 15 | 8 |
| **NUP37** | Up | 0.5 | 0.7 | 18 | 2 | Up | 1.5 | 0.2 | 14 | 3 |
| **LIFR** | Up | 1.9 | 0.2 | 25 | 1 | Up | 0.1 | 0.9 | 36 | 21 |
| **TRIM22** | Up | 1.7 | 0.0 | 83 | 4 | Up | 0.2 | 0.7 | 29 | 15 |
| **CLCC1** | Up | 0.8 | 0.3 | 57 | 5 | Up | 1.1 | 0.0 | 49 | 14 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CLSPN** | Up | 1.9 | 0.0 | 70 | 3 | Up | 0.1 | 0.9 | 24 | 14 |
| **LEPR** | Up | 1.3 | 0.1 | 48 | 3 | Up | 0.6 | 0.4 | 25 | 10 |
| **CBL** | Up | 1.3 | 0.2 | 46 | 3 | Up | 0.7 | 0.3 | 34 | 13 |
| **CRNDE** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 13 | 7 |
| **C8orf33** | Up | 1.5 | 0.2 | 37 | 2 | Up | 0.4 | 0.3 | 66 | 30 |
| **NAB1** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.5 | 0.3 | 47 | 20 |
| **NRN1** | Up | 0.2 | 0.9 | 8 | 1 | Up | 1.7 | 0.0 | 32 | 6 |
| **IKBKE** | Up | 0.1 | 0.9 | 27 | 4 | Up | 1.8 | 0.1 | 18 | 3 |
| **TNPO1** | Up | 1.9 | 0.0 | 167 | 7 | Up | 0.0 | 1.0 | 80 | 49 |
| **LOC100289130** | Up | 1.7 | 0.0 | 414 | 21 | Up | 0.3 | 0.4 | 145 | 74 |
| **BTBD10** | Up | 1.3 | 0.1 | 77 | 5 | Up | 0.6 | 0.4 | 28 | 11 |
| **NSMAF** | Up | 0.6 | 0.6 | 29 | 3 | Up | 1.3 | 0.1 | 29 | 7 |
| **AHDC1** | Up | 1.8 | 0.0 | 66 | 3 | Up | 0.1 | 0.9 | 18 | 10 |
| **MRPL15** | Up | 1.6 | 0.1 | 39 | 2 | Up | 0.3 | 0.6 | 35 | 17 |
| **LOC100505687** | Up | 1.2 | 0.4 | 16 | 1 | Up | 0.7 | 0.6 | 8 | 3 |
| **ZCRB1** | Up | 1.9 | 0.1 | 48 | 2 | Up | 0.0 | 1.0 | 35 | 21 |
| **FAM92B** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.9 | 11 | 6 |
| **ZNF513** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.2 | 0.8 | 31 | 17 |
| **EDEM3** | Up | 1.7 | 0.0 | 83 | 4 | Up | 0.2 | 0.8 | 34 | 18 |
| **RAB31** | Up | 1.5 | 0.0 | 106 | 6 | Up | 0.4 | 0.2 | 101 | 46 |
| **C11orf67** | Up | 1.5 | 0.1 | 53 | 3 | Up | 0.5 | 0.7 | 9 | 4 |
| **SMCR7L** | Up | 1.6 | 0.1 | 40 | 2 | Up | 0.3 | 0.6 | 40 | 20 |
| **GEMIN8** | Up | 1.7 | 0.2 | 22 | 1 | Up | 0.2 | 0.8 | 32 | 17 |
| **IGF1R** | Up | 1.6 | 0.0 | 79 | 4 | Up | 0.3 | 0.6 | 49 | 25 |
| **KIAA1737** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.5 | 0.5 | 30 | 13 |
| **PSME2** | Up | 1.2 | 0.0 | 205 | 14 | Up | 0.7 | 0.1 | 73 | 28 |
| **TMEM60** | Up | 1.2 | 0.3 | 30 | 2 | Up | 0.7 | 0.5 | 16 | 6 |
| **LMAN2L** | Up | 1.2 | 0.2 | 43 | 3 | Up | 0.7 | 0.3 | 30 | 11 |
| **BIVM** | Up | 0.9 | 0.4 | 25 | 2 | Up | 1.0 | 0.2 | 35 | 11 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LOC100507584** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.3 | 14 | 4 |
| **RNF32** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.3 | 14 | 4 |
| **SEPT14** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.3 | 14 | 4 |
| **BRD8** | Up | 0.6 | 0.3 | 96 | 10 | Up | 1.3 | 0.0 | 44 | 11 |
| **ATP1B3** | Up | 1.3 | 0.0 | 180 | 12 | Up | 0.6 | 0.2 | 73 | 29 |
| **CFDP1** | Up | 1.2 | 0.1 | 89 | 6 | Up | 0.7 | 0.2 | 49 | 19 |
| **METTL14** | Up | 1.1 | 0.4 | 27 | 2 | Up | 0.8 | 0.6 | 6 | 2 |
| **DPF2** | Up | 0.9 | 0.5 | 24 | 2 | Up | 1.0 | 0.1 | 46 | 14 |
| **ACBD5** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.5 | 0.5 | 23 | 10 |
| **ASUN** | Up | 0.7 | 0.6 | 21 | 2 | Up | 1.2 | 0.2 | 19 | 5 |
| **LOC100509105** | Up | 0.7 | 0.7 | 11 | 1 | Up | 1.2 | 0.6 | 4 | 1 |
| **MPP3** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.1 | 0.9 | 9 | 5 |
| **MCMBP** | Up | 1.7 | 0.1 | 42 | 2 | Up | 0.2 | 0.8 | 30 | 16 |
| **SEC63** | Up | 1.5 | 0.0 | 250 | 14 | Up | 0.4 | 0.5 | 63 | 30 |
| **S100A11** | Up | 1.5 | 0.0 | 295 | 17 | Up | 0.4 | 0.3 | 91 | 42 |
| **PBK** | Up | 0.9 | 0.4 | 25 | 2 | Up | 0.9 | 0.3 | 19 | 6 |
| **PTEN** | Up | 1.8 | 0.1 | 46 | 2 | Up | 0.1 | 0.9 | 76 | 45 |
| **YIPF5** | Up | 1.5 | 0.0 | 158 | 9 | Up | 0.4 | 0.6 | 30 | 14 |
| **DZIP1L** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **KIF7** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **LOC100132909** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **LOC643355** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **NLRP3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.1 | 0.5 | 7 | 2 |
| **KCTD20** | Up | 0.7 | 0.2 | 131 | 13 | Up | 1.2 | 0.1 | 41 | 11 |
| **C12orf45** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.7 | 0.5 | 11 | 4 |
| **LOC648987** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.7 | 0.5 | 11 | 4 |
| **INO80D** | Up | 1.8 | 0.2 | 24 | 1 | Up | 0.1 | 1.0 | 27 | 16 |
| **LOC100652858** | Up | 1.6 | 0.3 | 21 | 1 | Up | 0.2 | 0.8 | 25 | 13 |
| **ZNF543** | Up | 1.1 | 0.4 | 28 | 2 | Up | 0.8 | 0.5 | 14 | 5 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SPG21** | Up | 1.4 | 0.0 | 102 | 6 | Up | 0.4 | 0.4 | 51 | 23 |
| **MAP3K10** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.3 | 17 | 5 |
| **NR2F2** | Up | 1.8 | 0.0 | 173 | 8 | Up | 0.1 | 0.9 | 58 | 34 |
| **KBTBD4** | Up | 1.8 | 0.1 | 44 | 2 | Up | 0.1 | 0.9 | 21 | 12 |
| **PIK3R5** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.1 | 0.9 | 14 | 8 |
| **UNC50** | Up | 1.5 | 0.3 | 19 | 1 | Up | 0.4 | 0.5 | 38 | 18 |
| **LUZP6** | Up | 1.3 | 0.0 | 333 | 21 | Up | 0.5 | 0.2 | 95 | 41 |
| **ASCC3** | Up | 0.7 | 0.3 | 63 | 6 | Up | 1.1 | 0.2 | 25 | 7 |
| **PHF21A** | Up | 0.6 | 0.7 | 10 | 1 | Up | 1.3 | 0.0 | 56 | 14 |
| **C1orf220** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **LOC100505904** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **LOC100653021** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **SYNPO2L** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **THUMPD2** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **UBE3D** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **FKBP1A** | Up | 1.7 | 0.0 | 563 | 27 | Up | 0.1 | 0.8 | 119 | 68 |
| **PSMA3** | Up | 1.6 | 0.0 | 171 | 9 | Up | 0.3 | 0.6 | 58 | 30 |
| **WSB2** | Up | 1.6 | 0.0 | 171 | 9 | Up | 0.3 | 0.5 | 101 | 52 |
| **TIMM8B** | Up | 0.9 | 0.2 | 60 | 5 | Up | 0.9 | 0.2 | 34 | 11 |
| **MYO9A** | Up | 1.2 | 0.4 | 16 | 1 | Up | 0.6 | 0.5 | 15 | 6 |
| **CYLD** | Up | 0.8 | 0.4 | 34 | 3 | Up | 1.0 | 0.1 | 43 | 13 |
| **NDUFA4L2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.1 | 43 | 13 |
| **MNF1** | Up | 0.6 | 0.4 | 74 | 8 | Up | 1.3 | 0.2 | 20 | 5 |
| **ZNF217** | Up | 0.7 | 0.5 | 41 | 4 | Up | 1.1 | 0.4 | 11 | 3 |
| **HERC2P2** | Up | 0.9 | 0.4 | 36 | 3 | Up | 0.9 | 0.0 | 68 | 22 |
| **MCM8** | Up | 0.2 | 0.9 | 8 | 1 | Up | 1.6 | 0.2 | 15 | 3 |
| **CNBP** | Up | 1.2 | 0.0 | 258 | 18 | Up | 0.6 | 0.0 | 134 | 53 |
| **C7orf62** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **LOC100293044** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.5 | 10 | 3 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **OSGEPL1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **RSPH9** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.5 | 10 | 3 |
| **TUBD1** | Up | 1.8 | 0.2 | 23 | 1 | Up | 0.1 | 1.0 | 17 | 10 |
| **SUDS3** | Up | 1.7 | 0.1 | 42 | 2 | Up | 0.1 | 0.8 | 34 | 19 |
| **KRTCAP2** | Up | 0.9 | 0.4 | 37 | 3 | Up | 0.9 | 0.2 | 30 | 10 |
| **BCL11A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.2 | 26 | 8 |
| **CABLES2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.2 | 26 | 8 |
| **CHEK2** | Up | 0.7 | 0.7 | 11 | 1 | Up | 1.1 | 0.3 | 18 | 5 |
| **C10orf76** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.8 | 0.0 | 28 | 5 |
| **LOC100653005** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.1 | 1.0 | 27 | 16 |
| **MERTK** | Up | 1.3 | 0.4 | 17 | 1 | Up | 0.5 | 0.6 | 16 | 7 |
| **NQO1** | Up | 1.4 | 0.0 | 196 | 12 | Up | 0.4 | 0.3 | 87 | 40 |
| **SNHG3** | Up | 0.4 | 0.7 | 34 | 4 | Up | 1.4 | 0.3 | 13 | 3 |
| **LOC100509926** | Up | 1.4 | 0.0 | 85 | 5 | Up | 0.4 | 0.5 | 38 | 18 |
| **LOC100505702** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.9 | 0.5 | 12 | 4 |
| **LOC646168** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.4 | 13 | 4 |
| **TNFSF8** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.4 | 13 | 4 |
| **LSS** | Up | 0.7 | 0.4 | 42 | 4 | Up | 1.1 | 0.1 | 48 | 14 |
| **NDUFS5** | Up | 0.6 | 0.2 | 192 | 21 | Up | 1.2 | 0.0 | 58 | 15 |
| **FOXM1** | Up | 0.2 | 0.8 | 22 | 3 | Up | 1.6 | 0.1 | 25 | 5 |
| **FBXL6** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.0 | 1.0 | 15 | 9 |
| **CPSF6** | Up | 1.6 | 0.1 | 58 | 3 | Up | 0.2 | 0.8 | 41 | 22 |
| **LOC93622** | Up | 0.7 | 0.7 | 11 | 1 | Up | 1.1 | 0.2 | 28 | 8 |
| **CDCA2** | Up | 0.5 | 0.7 | 19 | 2 | Up | 1.2 | 0.4 | 8 | 2 |
| **CCNB1** | Up | 0.3 | 0.4 | 228 | 29 | Up | 1.5 | 0.0 | 36 | 8 |
| **ADCY3** | Up | 0.2 | 0.9 | 8 | 1 | Up | 1.5 | 0.0 | 43 | 9 |
| **SON** | Up | 1.4 | 0.0 | 215 | 13 | Up | 0.4 | 0.3 | 91 | 43 |
| **DUT** | Up | 0.8 | 0.3 | 57 | 5 | Up | 0.9 | 0.0 | 94 | 30 |
| **LRCH2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.3 | 16 | 5 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ROM1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 1.0 | 0.3 | 16 | 5 |
| **CCBL1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **CCDC83** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.0 | 1.0 | 10 | 6 |
| **FLJ45513** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LINC00092** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LINC00488** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LOC387723** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.0 | 1.0 | 10 | 6 |
| **ORAOV1** | Up | 1.8 | 0.6 | 2 | 0 | Up | 0.0 | 1.0 | 10 | 6 |
| **USP18** | Up | 1.8 | 0.2 | 23 | 1 | Up | 0.0 | 1.0 | 10 | 6 |
| **TGIF2** | Up | 0.3 | 0.7 | 32 | 4 | Up | 1.4 | 0.2 | 18 | 4 |
| **PPWD1** | Up | 1.6 | 0.1 | 58 | 3 | Up | 0.2 | 0.8 | 22 | 12 |
| **TNS3** | Up | 1.3 | 0.1 | 49 | 3 | Up | 0.4 | 0.5 | 48 | 22 |
| **RPL38** | Up | 0.5 | 0.2 | 199 | 22 | Up | 1.2 | 0.0 | 225 | 59 |
| **SCARB2** | Up | 1.4 | 0.0 | 100 | 6 | Up | 0.4 | 0.3 | 88 | 42 |
| **CSDC2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.1 | 47 | 15 |
| **SETD6** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.3 | 22 | 7 |
| **GINS4** | Up | 0.6 | 0.6 | 20 | 2 | Up | 1.1 | 0.4 | 11 | 3 |
| **GATAD1** | Up | 1.7 | 0.0 | 81 | 4 | Up | 0.1 | 0.9 | 38 | 22 |
| **RB1** | Up | 1.2 | 0.3 | 30 | 2 | Up | 0.6 | 0.5 | 24 | 10 |
| **DAZAP1** | Up | 0.1 | 0.9 | 20 | 3 | Up | 1.7 | 0.0 | 53 | 10 |
| **RBBP6** | Up | 1.5 | 0.2 | 37 | 2 | Up | 0.2 | 0.6 | 73 | 38 |
| **CEP68** | Up | 1.4 | 0.2 | 35 | 2 | Up | 0.3 | 0.5 | 53 | 26 |
| **PIGN** | Up | 1.3 | 0.4 | 17 | 1 | Up | 0.4 | 0.7 | 11 | 5 |
| **DHRS1** | Up | 0.8 | 0.5 | 23 | 2 | Up | 0.9 | 0.2 | 31 | 10 |
| **ITCH** | Up | 1.4 | 0.0 | 103 | 6 | Up | 0.3 | 0.6 | 42 | 21 |
| **GBP4** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.6 | 0.3 | 37 | 15 |
| **GZMH** | Up | 1.1 | 0.2 | 42 | 3 | Up | 0.6 | 0.5 | 15 | 6 |
| **MMP19** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.7 | 0.3 | 37 | 14 |
| **SGCB** | Up | 0.9 | 0.1 | 83 | 7 | Up | 0.8 | 0.2 | 46 | 16 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RCN1** | Up | 0.3 | 0.5 | 149 | 19 | Up | 1.4 | 0.0 | 91 | 21 |
| **GEMIN7** | Up | 1.3 | 0.4 | 17 | 1 | Up | 0.4 | 0.7 | 13 | 6 |
| **OSTF1** | Up | 1.1 | 0.2 | 54 | 4 | Up | 0.6 | 0.4 | 28 | 11 |
| **MYO5C** | Up | 1.5 | 0.1 | 38 | 2 | Up | 0.2 | 0.9 | 13 | 7 |
| **AGA** | Up | 1.0 | 0.3 | 39 | 3 | Up | 0.7 | 0.4 | 24 | 9 |
| **CBX5** | Up | 0.9 | 0.0 | 289 | 25 | Up | 0.8 | 0.0 | 116 | 40 |
| **NAV1** | Up | 0.5 | 0.4 | 82 | 9 | Up | 1.2 | 0.0 | 97 | 26 |
| **AMMECR1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.7 | 0.1 | 16 | 3 |
| **RPL7** | Up | 1.5 | 0.0 | 1885 | 105 | Up | 0.2 | 0.5 | 213 | 115 |
| **ESAM** | Up | 1.5 | 0.2 | 37 | 2 | Up | 0.2 | 0.8 | 34 | 18 |
| **CEP19** | Up | 1.3 | 0.3 | 31 | 2 | Up | 0.5 | 0.6 | 18 | 8 |
| **PSMB6** | Up | 1.2 | 0.0 | 197 | 14 | Up | 0.6 | 0.3 | 55 | 23 |
| **DARS** | Up | 0.8 | 0.2 | 77 | 7 | Up | 0.9 | 0.1 | 58 | 19 |
| **C7orf23** | Up | 1.6 | 0.3 | 20 | 1 | Up | 0.2 | 0.9 | 20 | 11 |
| **MSH3** | Up | 1.2 | 0.3 | 29 | 2 | Up | 0.6 | 0.5 | 24 | 10 |
| **ERAP1** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.3 | 0.7 | 30 | 15 |
| **PRR11** | Up | 1.1 | 0.0 | 190 | 14 | Up | 0.6 | 0.3 | 44 | 18 |
| **DCHS1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.2 | 33 | 11 |
| **ENPP5** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.4 | 18 | 6 |
| **KLF11** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.3 | 27 | 9 |
| **PLAC9** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.3 | 27 | 9 |
| **POLI** | Up | 0.7 | 0.7 | 11 | 1 | Up | 1.0 | 0.2 | 23 | 7 |
| **MAGOH** | Up | 1.6 | 0.3 | 20 | 1 | Up | 0.1 | 0.9 | 9 | 5 |
| **CPSF3** | Up | 0.4 | 0.6 | 66 | 8 | Up | 1.3 | 0.0 | 148 | 37 |
| **CYB561** | Up | 0.1 | 0.9 | 35 | 5 | Up | 1.5 | 0.0 | 81 | 17 |
| **TTC1** | Up | 1.3 | 0.0 | 136 | 9 | Up | 0.4 | 0.5 | 46 | 21 |
| **MAPK11** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.5 | 12 | 4 |
| **PPP1R37** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.4 | 15 | 5 |
| **ZSCAN30** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.4 | 15 | 5 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **PTGFRN** | Up | 1.6 | 0.0 | 174 | 9 | Up | 0.1 | 0.9 | 54 | 32 |
| **FXC1** | Up | 1.3 | 0.2 | 33 | 2 | Up | 0.3 | 0.6 | 37 | 18 |
| **PDCD4** | Up | 1.7 | 0.0 | 181 | 9 | Up | 0.0 | 1.0 | 62 | 38 |
| **LOC100507018** | Up | 1.6 | 0.3 | 20 | 1 | Up | 0.1 | 0.9 | 16 | 9 |
| **LIN7C** | Up | 1.5 | 0.0 | 73 | 4 | Up | 0.2 | 0.9 | 20 | 11 |
| **ZNF286B** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.3 | 0.9 | 6 | 3 |
| **CAAP1** | Up | 1.3 | 0.4 | 17 | 1 | Up | 0.4 | 0.7 | 23 | 11 |
| **GLG1** | Up | 1.2 | 0.0 | 247 | 17 | Up | 0.5 | 0.3 | 85 | 38 |
| **ENY2** | Up | 1.0 | 0.0 | 218 | 18 | Up | 0.7 | 0.2 | 43 | 16 |
| **HTR2A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **KLHL26** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **LOC100499405** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **LOC100509256** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.9 | 0.5 | 9 | 3 |
| **ZFAND2A** | Up | 0.4 | 0.8 | 9 | 1 | Up | 1.3 | 0.3 | 12 | 3 |
| **ZNF720** | Up | 0.4 | 0.8 | 9 | 1 | Up | 1.3 | 0.3 | 12 | 3 |
| **CEP170** | Up | 0.2 | 0.8 | 29 | 4 | Up | 1.5 | 0.1 | 23 | 5 |
| **SH3PXD2A** | Up | 1.6 | 0.3 | 21 | 1 | Up | 0.0 | 0.9 | 52 | 31 |
| **ATP5S** | Up | 0.5 | 0.7 | 19 | 2 | Up | 1.1 | 0.2 | 25 | 7 |
| **ZBTB33** | Up | 1.5 | 0.3 | 19 | 1 | Up | 0.2 | 0.9 | 13 | 7 |
| **ZFYVE20** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.3 | 0.7 | 43 | 22 |
| **CTCFL** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **FLJ36777** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **GNRH1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LINC00507** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100125556** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100505594** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100505711** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **LOC100652887** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **ORMDL3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.2 | 41 | 14 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RGP1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **SERINC4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **TDRD1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.6 | 6 | 2 |
| **CDKN2AIP** | Up | 0.7 | 0.7 | 11 | 1 | Up | 1.0 | 0.2 | 29 | 9 |
| **C1orf86** | Up | 0.5 | 0.6 | 36 | 4 | Up | 1.2 | 0.0 | 55 | 15 |
| **KAT2B** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.6 | 0.3 | 35 | 14 |
| **LOC100294341** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.7 | 0.3 | 27 | 10 |
| **BOC** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.2 | 32 | 11 |
| **HBEGF** | Up | 0.7 | 0.5 | 40 | 4 | Up | 1.0 | 0.1 | 36 | 11 |
| **KIF13B** | Up | 1.0 | 0.4 | 26 | 2 | Up | 0.6 | 0.4 | 28 | 11 |
| **SNRPE** | Up | 1.0 | 0.1 | 87 | 7 | Up | 0.7 | 0.3 | 31 | 12 |
| **C22orf13** | Up | 0.9 | 0.1 | 94 | 8 | Up | 0.7 | 0.2 | 41 | 15 |
| **CEP290** | Up | 0.6 | 0.7 | 10 | 1 | Up | 1.1 | 0.3 | 14 | 4 |
| **UNC119B** | Up | 0.1 | 0.9 | 20 | 3 | Up | 1.6 | 0.0 | 49 | 10 |
| **C17orf61** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.6 | 0.1 | 20 | 4 |
| **DCTN6** | Up | 0.8 | 0.4 | 45 | 4 | Up | 0.8 | 0.3 | 26 | 9 |
| **MRPS28** | Up | 1.3 | 0.1 | 49 | 3 | Up | 0.3 | 0.8 | 16 | 8 |
| **PDZD11** | Up | 1.3 | 0.2 | 46 | 3 | Up | 0.4 | 0.5 | 51 | 24 |
| **RAP1A** | Up | 1.3 | 0.2 | 46 | 3 | Up | 0.4 | 0.5 | 51 | 24 |
| **PPARA** | Up | 1.2 | 0.3 | 29 | 2 | Up | 0.5 | 0.4 | 50 | 22 |
| **DEFB1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.3 | 23 | 8 |
| **TEAD2** | Up | 1.0 | 0.3 | 38 | 3 | Up | 0.6 | 0.4 | 28 | 11 |
| **TMCC1** | Up | 0.9 | 0.1 | 130 | 11 | Up | 0.7 | 0.3 | 40 | 15 |
| **MORN1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.4 | 20 | 7 |
| **VOPP1** | Up | 0.4 | 0.5 | 83 | 10 | Up | 1.2 | 0.0 | 61 | 16 |
| **LSG1** | Up | 1.4 | 0.0 | 83 | 5 | Up | 0.2 | 0.8 | 23 | 12 |
| **C20orf11** | Up | 0.4 | 0.7 | 26 | 3 | Up | 1.2 | 0.0 | 56 | 15 |
| **VSIG1** | Up | 1.1 | 0.2 | 54 | 4 | Up | 0.5 | 0.3 | 47 | 20 |
| **ANGPT4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CLDN14** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **FLJ23865** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **IL12B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LDHAL6A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LOC100216545** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LOC100286844** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LOC100507418** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LOC100653320** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LOC339788** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LRRC56** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **LY6G5C** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **RPRML** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **TOP1P2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.7 | 3 | 1 |
| **DAXX** | Up | 0.6 | 0.4 | 66 | 7 | Up | 1.0 | 0.1 | 40 | 12 |
| **UTP6** | Up | 1.3 | 0.1 | 48 | 3 | Up | 0.3 | 0.8 | 10 | 5 |
| **ADAMTS2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.4 | 17 | 6 |
| **LPCAT4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.2 | 42 | 15 |
| **MPI** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.9 | 0.1 | 46 | 15 |
| **SLC25A26** | Up | 0.2 | 0.8 | 30 | 4 | Up | 1.4 | 0.2 | 17 | 4 |
| **OPA3** | Up | 1.4 | 0.1 | 51 | 3 | Up | 0.2 | 0.7 | 45 | 24 |
| **FAM105B** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.5 | 0.6 | 18 | 8 |
| **KDM3A** | Up | 0.3 | 0.8 | 23 | 3 | Up | 1.3 | 0.1 | 33 | 8 |
| **C12orf5** | Up | 1.2 | 0.1 | 85 | 6 | Up | 0.4 | 0.5 | 33 | 15 |
| **PRPF18** | Up | 1.2 | 0.3 | 29 | 2 | Up | 0.4 | 0.6 | 20 | 9 |
| **SH3TC2** | Up | 0.4 | 0.8 | 9 | 1 | Up | 1.2 | 0.3 | 15 | 4 |
| **NAV3** | Up | 1.3 | 0.2 | 32 | 2 | Up | 0.3 | 0.8 | 12 | 6 |
| **USP42** | Up | 1.2 | 0.4 | 16 | 1 | Up | 0.4 | 0.5 | 54 | 26 |
| **MAP1LC3C** | Up | 1.1 | 0.4 | 27 | 2 | Up | 0.5 | 0.5 | 19 | 8 |
| **FZD8** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.5 | 14 | 5 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SLC25A53** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.8 | 0.5 | 14 | 5 |
| **YPEL1** | Up | 0.4 | 0.8 | 9 | 1 | Up | 1.2 | 0.1 | 37 | 10 |
| **C1orf135** | Up | 1.5 | 0.3 | 19 | 1 | Up | 0.1 | 0.9 | 7 | 4 |
| **LOC100130581** | Up | 1.5 | 0.3 | 19 | 1 | Up | 0.1 | 0.9 | 26 | 15 |
| **MDFIC** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.5 | 0.5 | 19 | 8 |
| **FNDC3B** | Up | 1.0 | 0.0 | 164 | 13 | Up | 0.6 | 0.3 | 41 | 17 |
| **CTNNA1** | Up | 0.9 | 0.0 | 414 | 36 | Up | 0.7 | 0.0 | 176 | 67 |
| **UNC5B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.8 | 0.4 | 22 | 8 |
| **PTAFR** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.9 | 0.2 | 39 | 13 |
| **PXDN** | Up | 0.7 | 0.1 | 172 | 17 | Up | 0.9 | 0.0 | 102 | 34 |
| **GLB1** | Up | 0.6 | 0.4 | 67 | 7 | Up | 1.0 | 0.1 | 48 | 15 |
| **HMGN3** | Up | 1.5 | 0.0 | 128 | 7 | Up | 0.0 | 1.0 | 68 | 41 |
| **ZNF187** | Up | 1.3 | 0.2 | 32 | 2 | Up | 0.3 | 0.9 | 6 | 3 |
| **ARMCX6** | Up | 1.2 | 0.4 | 16 | 1 | Up | 0.3 | 0.6 | 35 | 17 |
| **MPHOSPH6** | Up | 1.2 | 0.2 | 45 | 3 | Up | 0.3 | 0.6 | 33 | 16 |
| **MAD2L1BP** | Up | 1.1 | 0.4 | 27 | 2 | Up | 0.5 | 0.5 | 21 | 9 |
| **MTMR10** | Up | 1.0 | 0.3 | 39 | 3 | Up | 0.5 | 0.4 | 31 | 13 |
| **NUDCD3** | Up | 0.6 | 0.5 | 30 | 3 | Up | 0.9 | 0.0 | 71 | 23 |
| **RBFA** | Up | 0.3 | 0.8 | 16 | 2 | Up | 1.3 | 0.3 | 12 | 3 |
| **ULBP2** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.5 | 0.5 | 5 | 1 |
| **NFATC4** | Up | 0.0 | 1.0 | 13 | 2 | Up | 1.6 | 0.0 | 34 | 7 |
| **CDK2** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.4 | 0.7 | 11 | 5 |
| **WDR83OS** | Up | 1.4 | 0.0 | 129 | 8 | Up | 0.2 | 0.7 | 56 | 30 |
| **RAB8B** | Up | 1.3 | 0.1 | 61 | 4 | Up | 0.3 | 0.8 | 18 | 9 |
| **OCIAD2** | Up | 1.0 | 0.1 | 91 | 7 | Up | 0.5 | 0.4 | 35 | 15 |
| **SETD4** | Up | 0.5 | 0.7 | 19 | 2 | Up | 1.0 | 0.2 | 33 | 10 |
| **ADCK1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.5 | 11 | 4 |
| **NTN5** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.4 | 19 | 7 |
| **ZNF135** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.5 | 11 | 4 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **BTG3** | Up | 1.5 | 0.3 | 19 | 1 | Up | 0.1 | 0.9 | 29 | 17 |
| **TDP1** | Up | 1.3 | 0.3 | 31 | 2 | Up | 0.3 | 0.8 | 14 | 7 |
| **TBRG1** | Up | 1.2 | 0.3 | 29 | 2 | Up | 0.4 | 0.5 | 47 | 22 |
| **PTPN11** | Up | 1.0 | 0.1 | 112 | 9 | Up | 0.6 | 0.3 | 48 | 20 |
| **SMARCE1** | Up | 0.7 | 0.1 | 141 | 14 | Up | 0.9 | 0.1 | 68 | 23 |
| **SIAE** | Up | 0.9 | 0.5 | 24 | 2 | Up | 0.7 | 0.3 | 36 | 14 |
| **NUP98** | Up | 0.3 | 0.7 | 24 | 3 | Up | 1.2 | 0.1 | 38 | 10 |
| **C15orf2** | Up | 0.2 | 0.9 | 8 | 1 | Up | 1.3 | 0.0 | 40 | 10 |
| **C1QTNF6** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.5 | 0.2 | 14 | 3 |
| **LOC100289019** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.1 | 0.9 | 16 | 9 |
| **LRCH1** | Up | 1.2 | 0.4 | 16 | 1 | Up | 0.3 | 0.8 | 16 | 8 |
| **MARCH1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.5 | 16 | 6 |
| **POU6F1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.5 | 16 | 6 |
| **PSMC5** | Up | 0.7 | 0.1 | 132 | 13 | Up | 0.8 | 0.1 | 61 | 21 |
| **XPNPEP1** | Up | 0.5 | 0.5 | 54 | 6 | Up | 1.0 | 0.1 | 46 | 14 |
| **NLRC5** | Up | 0.6 | 0.7 | 10 | 1 | Up | 1.0 | 0.1 | 38 | 12 |
| **CRTC1** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.7 | 0.3 | 29 | 11 |
| **OTUD7B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.3 | 29 | 11 |
| **BMP8A** | Up | 1.5 | 0.3 | 19 | 1 | Up | 0.0 | 1.0 | 10 | 6 |
| **PGPEP1** | Up | 1.5 | 0.1 | 70 | 4 | Up | 0.0 | 0.9 | 84 | 50 |
| **CD46** | Up | 1.3 | 0.0 | 186 | 12 | Up | 0.2 | 0.5 | 120 | 64 |
| **DNM1P41** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **LOC100506560** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **LOC100506874** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **RBP7** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **RBPJL** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **ZNF498** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.6 | 8 | 3 |
| **SLC7A7** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.9 | 0.3 | 25 | 8 |
| **RNF207** | Up | 1.3 | 0.4 | 17 | 1 | Up | 0.2 | 0.8 | 22 | 12 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MRPL18** | Up | 0.9 | 0.2 | 80 | 7 | Up | 0.6 | 0.2 | 63 | 25 |
| **SYNC** | Up | 0.5 | 0.5 | 46 | 5 | Up | 1.0 | 0.1 | 60 | 19 |
| **SLC35E2** | Up | 0.3 | 0.7 | 32 | 4 | Up | 1.2 | 0.0 | 51 | 14 |
| **UBE3C** | Up | 0.2 | 0.8 | 30 | 4 | Up | 1.3 | 0.0 | 43 | 11 |
| **PIAS1** | Up | 0.0 | 1.0 | 13 | 2 | Up | 1.5 | 0.0 | 37 | 8 |
| **FOXJ2** | Up | 1.4 | 0.4 | 18 | 1 | Up | 0.1 | 0.9 | 19 | 11 |
| **LOC220906** | Up | 1.4 | 0.0 | 248 | 15 | Up | 0.1 | 0.9 | 55 | 32 |
| **TMCC3** | Up | 1.3 | 0.4 | 17 | 1 | Up | 0.2 | 0.9 | 11 | 6 |
| **PRKAG2** | Up | 1.1 | 0.3 | 41 | 3 | Up | 0.4 | 0.4 | 60 | 28 |
| **GOLGB1** | Up | 1.0 | 0.2 | 64 | 5 | Up | 0.5 | 0.3 | 70 | 31 |
| **AGAP2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **SBDSP1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **TMEM35** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.5 | 13 | 5 |
| **H3F3A** | Up | 0.8 | 0.0 | 286 | 27 | Up | 0.7 | 0.0 | 225 | 84 |
| **GDAP2** | Up | 0.4 | 0.7 | 17 | 2 | Up | 1.1 | 0.2 | 28 | 8 |
| **LOC100507930** | Up | 0.2 | 0.8 | 15 | 2 | Up | 1.3 | 0.2 | 16 | 4 |
| **NAV2** | Up | 1.4 | 0.1 | 66 | 4 | Up | 0.1 | 0.9 | 42 | 24 |
| **ZNFX1-AS1** | Up | 1.3 | 0.2 | 33 | 2 | Up | 0.1 | 0.8 | 59 | 33 |
| **RPP14** | Up | 1.1 | 0.1 | 68 | 5 | Up | 0.4 | 0.5 | 59 | 28 |
| **COG6** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.5 | 0.4 | 31 | 13 |
| **PFDN5** | Up | 0.8 | 0.0 | 196 | 18 | Up | 0.7 | 0.1 | 78 | 30 |
| **NPEPPS** | Up | 1.4 | 0.0 | 264 | 16 | Up | 0.1 | 0.9 | 70 | 41 |
| **SMC6** | Up | 1.3 | 0.2 | 32 | 2 | Up | 0.2 | 0.8 | 24 | 13 |
| **PUM1** | Up | 1.0 | 0.1 | 76 | 6 | Up | 0.5 | 0.4 | 52 | 23 |
| **C3orf18** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.5 | 18 | 7 |
| **FAM186B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.5 | 18 | 7 |
| **NFE2L3** | Up | 0.8 | 0.5 | 23 | 2 | Up | 0.7 | 0.5 | 18 | 7 |
| **RAPGEFL1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.7 | 0.3 | 41 | 16 |
| **GNG5** | Up | 0.5 | 0.5 | 70 | 8 | Up | 1.0 | 0.0 | 62 | 19 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CCNY** | Up | 1.4 | 0.0 | 82 | 5 | Up | 0.1 | 0.8 | 99 | 57 |
| **TBC1D8B** | Up | 1.2 | 0.3 | 30 | 2 | Up | 0.3 | 0.9 | 4 | 2 |
| **ERO1L** | Up | 1.1 | 0.2 | 55 | 4 | Up | 0.4 | 0.6 | 27 | 13 |
| **LOC400682** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.4 | 0.7 | 11 | 5 |
| **PRICKLE2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.4 | 28 | 11 |
| **PLOD1** | Up | 0.7 | 0.2 | 120 | 12 | Up | 0.8 | 0.1 | 76 | 27 |
| **PCBP1** | Up | 0.6 | 0.5 | 39 | 4 | Up | 0.9 | 0.0 | 147 | 50 |
| **TUBGCP4** | Up | 0.3 | 0.7 | 31 | 4 | Up | 1.2 | 0.3 | 15 | 4 |
| **KLHL7-AS1** | Up | 1.1 | 0.4 | 27 | 2 | Up | 0.4 | 0.7 | 13 | 6 |
| **MFAP1** | Up | 0.3 | 0.7 | 40 | 5 | Up | 1.1 | 0.1 | 32 | 9 |
| **NBPF15** | Up | 1.2 | 0.2 | 44 | 3 | Up | 0.3 | 0.7 | 43 | 22 |
| **APPBP2** | Up | 0.7 | 0.5 | 32 | 3 | Up | 0.7 | 0.3 | 35 | 13 |
| **BRCA2** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.8 | 0.5 | 14 | 5 |
| **CEP192** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.8 | 0.5 | 14 | 5 |
| **FBXL7** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.8 | 0.5 | 14 | 5 |
| **ALDH18A1** | Up | 0.2 | 0.8 | 44 | 6 | Up | 1.2 | 0.0 | 58 | 15 |
| **RPL19** | Up | 0.2 | 0.4 | 397 | 55 | Up | 1.2 | 0.0 | 380 | 99 |
| **CMC2** | Up | 1.4 | 0.1 | 52 | 3 | Up | 0.0 | 1.0 | 41 | 25 |
| **ARSD** | Up | 1.3 | 0.1 | 48 | 3 | Up | 0.1 | 0.8 | 53 | 30 |
| **ZNF234** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.4 | 0.7 | 13 | 6 |
| **SRSF12** | Up | 0.5 | 0.7 | 18 | 2 | Up | 1.0 | 0.2 | 29 | 9 |
| **MTERFD2** | Up | 0.4 | 0.8 | 9 | 1 | Up | 1.0 | 0.1 | 50 | 15 |
| **LOC100507458** | Up | 0.2 | 0.9 | 8 | 1 | Up | 1.2 | 0.6 | 4 | 1 |
| **DHX8** | Up | 0.9 | 0.5 | 24 | 2 | Up | 0.6 | 0.5 | 24 | 10 |
| **PURB** | Up | 1.2 | 0.1 | 89 | 6 | Up | 0.2 | 0.7 | 73 | 39 |
| **LIMS1** | Up | 1.1 | 0.0 | 125 | 9 | Up | 0.3 | 0.6 | 46 | 23 |
| **VAMP8** | Up | 0.5 | 0.6 | 35 | 4 | Up | 1.0 | 0.2 | 32 | 10 |
| **KIAA1598** | Up | 1.3 | 0.4 | 17 | 1 | Up | 0.1 | 0.9 | 35 | 20 |
| **RPS6KA2** | Up | 1.0 | 0.2 | 65 | 5 | Up | 0.4 | 0.6 | 32 | 15 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **P4HA1** | Up | 1.0 | 0.2 | 74 | 6 | Up | 0.5 | 0.5 | 27 | 12 |
| **ZCCHC10** | Up | 0.9 | 0.3 | 49 | 4 | Up | 0.5 | 0.6 | 16 | 7 |
| **C9orf152** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **COL27A1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **GPR173** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **LOC100130855** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **LOC100506290** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **LOC285375** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **PHOSPHO1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **SLC25A5-AS1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **TLCD1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **ZMYND15** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.6 | 10 | 4 |
| **ACOT9** | Up | 0.7 | 0.4 | 51 | 5 | Up | 0.7 | 0.3 | 30 | 11 |
| **PAPOLA** | Up | 0.6 | 0.2 | 159 | 17 | Up | 0.8 | 0.0 | 102 | 35 |
| **MAPRE1** | Up | 1.4 | 0.0 | 241 | 15 | Up | 0.1 | 0.9 | 71 | 42 |
| **LOC100506974** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.4 | 0.7 | 19 | 9 |
| **PSAP** | Up | 0.9 | 0.0 | 573 | 50 | Up | 0.5 | 0.0 | 374 | 159 |
| **HINT1** | Up | 0.8 | 0.1 | 127 | 12 | Up | 0.7 | 0.1 | 90 | 35 |
| **RBAK** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.9 | 0.5 | 9 | 3 |
| **ANGPTL2** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.4 | 0.0 | 38 | 9 |
| **PPP2R2A** | Up | 1.2 | 0.0 | 149 | 10 | Up | 0.2 | 0.8 | 44 | 24 |
| **MED31** | Up | 1.2 | 0.4 | 16 | 1 | Up | 0.2 | 0.9 | 13 | 7 |
| **SPCS3** | Up | 1.2 | 0.0 | 140 | 10 | Up | 0.3 | 0.7 | 41 | 21 |
| **TUBB6** | Up | 0.9 | 0.1 | 85 | 7 | Up | 0.5 | 0.5 | 34 | 15 |
| **PDSS1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.4 | 27 | 11 |
| **RHBDF1** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.7 | 0.3 | 27 | 10 |
| **GORAB** | Up | 0.4 | 0.8 | 9 | 1 | Up | 1.0 | 0.5 | 10 | 3 |
| **CACNG8** | Up | 0.3 | 0.8 | 23 | 3 | Up | 1.2 | 0.1 | 40 | 11 |
| **DHX35** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.4 | 0.2 | 21 | 5 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ZFP90** | Up | 1.2 | 0.3 | 30 | 2 | Up | 0.2 | 0.8 | 30 | 16 |
| **C2orf27B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **FLJ45256** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **KHDRBS2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **LOC554249** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **MCM9** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.6 | 0.8 | 5 | 2 |
| **PRICKLE3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **SPRR1B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.6 | 0.8 | 5 | 2 |
| **PAM** | Up | 1.3 | 0.0 | 144 | 9 | Up | 0.1 | 0.9 | 59 | 35 |
| **LOC100499466** | Up | 1.3 | 0.0 | 125 | 8 | Up | 0.1 | 0.8 | 88 | 51 |
| **CDK13** | Up | 1.1 | 0.2 | 42 | 3 | Up | 0.3 | 0.6 | 49 | 25 |
| **GNPDA2** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.5 | 0.6 | 18 | 8 |
| **GNS** | Up | 0.8 | 0.1 | 124 | 11 | Up | 0.6 | 0.3 | 55 | 23 |
| **FBXO27** | Up | 0.7 | 0.4 | 52 | 5 | Up | 0.7 | 0.3 | 42 | 16 |
| **FAM40A** | Up | 0.7 | 0.5 | 31 | 3 | Up | 0.7 | 0.4 | 24 | 9 |
| **C5orf28** | Up | 0.2 | 0.8 | 29 | 4 | Up | 1.2 | 0.2 | 19 | 5 |
| **SBDS** | Up | 0.5 | 0.5 | 55 | 6 | Up | 0.9 | 0.1 | 56 | 19 |
| **UBE2D2** | Up | 1.3 | 0.0 | 139 | 9 | Up | 0.1 | 0.9 | 57 | 33 |
| **FAM104A** | Up | 1.3 | 0.3 | 31 | 2 | Up | 0.1 | 0.9 | 32 | 18 |
| **LRRC8B** | Up | 1.1 | 0.2 | 54 | 4 | Up | 0.3 | 0.8 | 20 | 10 |
| **MTO1** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.4 | 0.5 | 31 | 14 |
| **STAM2** | Up | 1.1 | 0.1 | 93 | 7 | Up | 0.3 | 0.6 | 38 | 19 |
| **MRPS33** | Up | 1.0 | 0.1 | 90 | 7 | Up | 0.3 | 0.6 | 39 | 19 |
| **ST13** | Up | 1.1 | 0.0 | 111 | 8 | Up | 0.2 | 0.7 | 55 | 29 |
| **FBXL20** | Up | 0.9 | 0.1 | 85 | 7 | Up | 0.4 | 0.3 | 72 | 33 |
| **CECR5** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.4 | 38 | 16 |
| **CMKLR1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.6 | 12 | 5 |
| **FAM117A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.6 | 12 | 5 |
| **GPD2** | Up | 0.4 | 0.7 | 17 | 2 | Up | 1.0 | 0.2 | 29 | 9 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **HP1BP3** | Up | 0.8 | 0.2 | 77 | 7 | Up | 0.6 | 0.2 | 93 | 39 |
| **GRB10** | Up | 0.6 | 0.6 | 29 | 3 | Up | 0.8 | 0.3 | 25 | 9 |
| **RBFOX2** | Up | 0.5 | 0.4 | 87 | 10 | Up | 0.9 | 0.0 | 111 | 37 |
| **GAB3** | Up | 0.2 | 0.8 | 15 | 2 | Up | 1.1 | 0.4 | 11 | 3 |
| **PIGS** | Up | 1.1 | 0.4 | 27 | 2 | Up | 0.3 | 0.7 | 24 | 12 |
| **SLC6A6** | Up | 1.1 | 0.3 | 40 | 3 | Up | 0.3 | 0.8 | 12 | 6 |
| **ZNF320** | Up | 1.1 | 0.4 | 27 | 2 | Up | 0.3 | 0.7 | 24 | 12 |
| **TULP4** | Up | 0.7 | 0.5 | 40 | 4 | Up | 0.7 | 0.3 | 29 | 11 |
| **ALPK1** | Up | 0.5 | 0.7 | 18 | 2 | Up | 0.9 | 0.4 | 18 | 6 |
| **EVI5** | Up | 1.3 | 0.2 | 46 | 3 | Up | 0.1 | 0.9 | 19 | 11 |
| **IPO9** | Up | 1.2 | 0.0 | 103 | 7 | Up | 0.1 | 0.8 | 65 | 37 |
| **ARL3** | Up | 1.0 | 0.1 | 91 | 7 | Up | 0.3 | 0.6 | 50 | 25 |
| **LOC646762** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.3 | 0.7 | 26 | 13 |
| **C7orf10** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.5 | 21 | 9 |
| **PHKA1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.6 | 14 | 6 |
| **PYCRL** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.5 | 0.6 | 14 | 6 |
| **UBA2** | Up | 0.0 | 1.0 | 38 | 6 | Up | 1.3 | 0.0 | 66 | 16 |
| **LXN** | Up | 1.3 | 0.0 | 107 | 7 | Up | 0.1 | 1.0 | 27 | 16 |
| **LOC100505829** | Up | 1.1 | 0.0 | 1231 | 95 | Up | 0.3 | 0.1 | 440 | 224 |
| **MIER3** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.4 | 0.7 | 15 | 7 |
| **HEXB** | Up | 0.8 | 0.3 | 66 | 6 | Up | 0.5 | 0.3 | 61 | 26 |
| **LGMN** | Up | 0.3 | 0.7 | 31 | 4 | Up | 1.0 | 0.0 | 111 | 33 |
| **MANEAL** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.5 | 0.4 | 37 | 16 |
| **TFE3** | Up | 0.1 | 0.9 | 21 | 3 | Up | 1.2 | 0.1 | 30 | 8 |
| **CCDC126** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.3 | 0.9 | 6 | 3 |
| **GALNTL4** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.3 | 0.9 | 6 | 3 |
| **FBN1** | Up | 0.9 | 0.2 | 82 | 7 | Up | 0.4 | 0.6 | 24 | 11 |
| **BCL2L14** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **BCORP1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.8 | 7 | 3 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DHX58** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **GFRA3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **LLGL2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.4 | 46 | 20 |
| **WRAP53** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.5 | 23 | 10 |
| **ZNF366** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.8 | 7 | 3 |
| **SLC20A1** | Up | 0.8 | 0.3 | 64 | 6 | Up | 0.6 | 0.3 | 41 | 17 |
| **SYDE2** | Up | 0.3 | 0.8 | 23 | 3 | Up | 1.1 | 0.5 | 7 | 2 |
| **NUTF2** | Up | 0.2 | 0.7 | 96 | 13 | Up | 1.1 | 0.1 | 45 | 13 |
| **SPARC** | Up | 0.2 | 0.6 | 405 | 58 | Up | 1.2 | 0.0 | 228 | 63 |
| **RRAGB** | Up | 1.2 | 0.4 | 16 | 1 | Up | 0.1 | 1.0 | 12 | 7 |
| **ORC3** | Up | 0.9 | 0.4 | 36 | 3 | Up | 0.4 | 0.6 | 28 | 13 |
| **RHPN1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.6 | 16 | 7 |
| **FAM134A** | Up | 1.2 | 0.0 | 134 | 9 | Up | 0.1 | 0.9 | 54 | 32 |
| **BACH1** | Up | 1.0 | 0.4 | 26 | 2 | Up | 0.3 | 0.8 | 20 | 10 |
| **BCL9** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.5 | 25 | 11 |
| **UNC13A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.5 | 25 | 11 |
| **PTGR2** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.7 | 0.5 | 11 | 4 |
| **SNAP29** | Up | 0.6 | 0.4 | 74 | 8 | Up | 0.7 | 0.2 | 41 | 15 |
| **MCU** | Up | 0.1 | 0.9 | 20 | 3 | Up | 1.2 | 0.1 | 27 | 7 |
| **PGM3** | Up | 1.0 | 0.1 | 88 | 7 | Up | 0.3 | 0.7 | 28 | 14 |
| **RPLP0P2** | Up | 0.5 | 0.7 | 19 | 2 | Up | 0.7 | 0.3 | 30 | 11 |
| **VPS33A** | Up | 0.3 | 0.7 | 24 | 3 | Up | 1.0 | 0.3 | 16 | 5 |
| **PSIP1** | Up | 1.1 | 0.2 | 56 | 4 | Up | 0.2 | 0.8 | 38 | 21 |
| **ARPC1A** | Up | 1.2 | 0.0 | 114 | 8 | Up | 0.1 | 0.8 | 90 | 52 |
| **EIF2S1** | Up | 1.2 | 0.0 | 283 | 20 | Up | 0.1 | 0.9 | 64 | 37 |
| **RALGAPA2** | Up | 1.1 | 0.4 | 28 | 2 | Up | 0.2 | 0.8 | 44 | 24 |
| **ZNF791** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.2 | 0.9 | 2 | 1 |
| **CEACAM5** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.5 | 0.1 | 227 | 102 |
| **AGK** | Up | 0.7 | 0.4 | 50 | 5 | Up | 0.6 | 0.3 | 45 | 18 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **SNX4** | Up | 0.6 | 0.5 | 30 | 3 | Up | 0.6 | 0.3 | 38 | 15 |
| **COPB1** | Up | 0.5 | 0.3 | 133 | 15 | Up | 0.8 | 0.1 | 64 | 23 |
| **FAM136A** | Up | 0.5 | 0.6 | 45 | 5 | Up | 0.8 | 0.2 | 39 | 14 |
| **NTAN1** | Up | 0.4 | 0.7 | 26 | 3 | Up | 0.8 | 0.2 | 44 | 15 |
| **KIAA0907** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.9 | 0.2 | 39 | 13 |
| **CAND1** | Up | 0.3 | 0.5 | 188 | 25 | Up | 1.0 | 0.0 | 62 | 19 |
| **QKI** | Up | 1.2 | 0.0 | 159 | 11 | Up | 0.1 | 0.9 | 109 | 64 |
| **SNX27** | Up | 1.0 | 0.1 | 113 | 9 | Up | 0.3 | 0.5 | 88 | 45 |
| **MED21** | Up | 1.0 | 0.1 | 111 | 9 | Up | 0.3 | 0.8 | 20 | 10 |
| **ADSS** | Up | 0.9 | 0.2 | 61 | 5 | Up | 0.3 | 0.5 | 49 | 24 |
| **GNPNAT1** | Up | 0.8 | 0.3 | 67 | 6 | Up | 0.4 | 0.6 | 20 | 9 |
| **SLC43A3** | Up | 0.5 | 0.5 | 46 | 5 | Up | 0.7 | 0.3 | 35 | 13 |
| **TLE3** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.9 | 0.1 | 47 | 16 |
| **RPF2** | Up | 0.2 | 0.7 | 52 | 7 | Up | 1.0 | 0.1 | 50 | 15 |
| **MOCS3** | Up | 1.2 | 0.4 | 16 | 1 | Up | 0.0 | 1.0 | 10 | 6 |
| **UST** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.1 | 0.9 | 30 | 17 |
| **SLC4A1AP** | Up | 1.0 | 0.3 | 39 | 3 | Up | 0.2 | 0.8 | 23 | 12 |
| **ERF** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.4 | 0.5 | 33 | 15 |
| **ME2** | Up | 0.8 | 0.2 | 78 | 7 | Up | 0.4 | 0.5 | 44 | 20 |
| **RAP1GAP2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.4 | 0.6 | 22 | 10 |
| **SLC35E2B** | Up | 0.3 | 0.8 | 16 | 2 | Up | 1.0 | 0.1 | 57 | 18 |
| **THNSL1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.2 | 0.6 | 4 | 1 |
| **UBE2J1** | Up | 1.2 | 0.0 | 115 | 8 | Up | 0.1 | 0.9 | 69 | 41 |
| **ERAP2** | Up | 1.1 | 0.0 | 147 | 11 | Up | 0.2 | 0.9 | 20 | 11 |
| **SIKE1** | Up | 1.0 | 0.4 | 26 | 2 | Up | 0.2 | 0.8 | 27 | 14 |
| **NAP1L5** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.4 | 0.6 | 24 | 11 |
| **C9orf80** | Up | 0.5 | 0.6 | 28 | 3 | Up | 0.7 | 0.4 | 24 | 9 |
| **RAP1B** | Up | 0.4 | 0.4 | 156 | 19 | Up | 0.9 | 0.0 | 112 | 38 |
| **MSL2** | Up | 0.3 | 0.8 | 16 | 2 | Up | 0.9 | 0.3 | 22 | 7 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **TRIM16** | Up | 0.3 | 0.7 | 31 | 4 | Up | 1.0 | 0.3 | 16 | 5 |
| **PSENEN** | Up | 1.2 | 0.1 | 60 | 4 | Up | 0.0 | 1.0 | 18 | 11 |
| **LOC389834** | Up | 1.2 | 0.3 | 30 | 2 | Up | 0.0 | 1.0 | 15 | 9 |
| **SF3B1** | Up | 1.0 | 0.1 | 77 | 6 | Up | 0.2 | 0.6 | 83 | 44 |
| **ADCY6** | Up | 0.9 | 0.4 | 25 | 2 | Up | 0.3 | 0.6 | 52 | 26 |
| **G2E3** | Up | 0.9 | 0.4 | 25 | 2 | Up | 0.3 | 0.8 | 14 | 7 |
| **FANCL** | Up | 0.8 | 0.5 | 23 | 2 | Up | 0.4 | 0.6 | 26 | 12 |
| **ZBTB40** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.8 | 0.2 | 41 | 14 |
| **PISD** | Up | 0.3 | 0.7 | 24 | 3 | Up | 0.9 | 0.1 | 43 | 14 |
| **APLP2** | Up | 1.0 | 0.0 | 528 | 41 | Up | 0.2 | 0.5 | 231 | 125 |
| **FAM19A1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.4 | 0.7 | 13 | 6 |
| **FUT9** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.4 | 0.7 | 13 | 6 |
| **LOC100506305** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.4 | 0.7 | 13 | 6 |
| **ZFP14** | Up | 0.8 | 0.5 | 33 | 3 | Up | 0.4 | 0.5 | 31 | 14 |
| **CXCR4** | Up | 0.6 | 0.6 | 20 | 2 | Up | 0.6 | 0.3 | 42 | 17 |
| **WWP2** | Up | 0.3 | 0.8 | 16 | 2 | Up | 0.9 | 0.2 | 34 | 11 |
| **HDAC2** | Up | 0.3 | 0.7 | 90 | 12 | Up | 1.0 | 0.1 | 51 | 16 |
| **SMARCC1** | Up | 0.2 | 0.7 | 74 | 10 | Up | 1.0 | 0.1 | 55 | 17 |
| **ITSN2** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.1 | 0.9 | 24 | 14 |
| **TBXA2R** | Up | 0.9 | 0.3 | 46 | 4 | Up | 0.4 | 0.5 | 48 | 23 |
| **R3HCC1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.4 | 0.6 | 32 | 15 |
| **SLC7A6** | Up | 0.5 | 0.7 | 18 | 2 | Up | 0.7 | 0.3 | 30 | 11 |
| **KNTC1** | Up | 0.2 | 0.9 | 8 | 1 | Up | 1.0 | 0.4 | 13 | 4 |
| **USP37** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.1 | 0.9 | 29 | 17 |
| **WWC3** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.1 | 0.9 | 34 | 20 |
| **VPS54** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.4 | 0.7 | 17 | 8 |
| **RARB** | Up | 0.7 | 0.5 | 31 | 3 | Up | 0.5 | 0.3 | 51 | 22 |
| **KIAA1279** | Up | 0.6 | 0.6 | 29 | 3 | Up | 0.6 | 0.3 | 35 | 14 |
| **LOC100147773** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.8 | 0.7 | 3 | 1 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **HAUS5** | Up | 0.2 | 0.8 | 50 | 7 | Up | 1.0 | 0.3 | 20 | 6 |
| **TP73-AS1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.2 | 0.2 | 22 | 6 |
| **TCEB1** | Up | 1.1 | 0.0 | 135 | 10 | Up | 0.1 | 0.9 | 47 | 27 |
| **TBC1D23** | Up | 0.7 | 0.3 | 79 | 8 | Up | 0.5 | 0.4 | 31 | 13 |
| **LOC286186** | Up | 0.1 | 0.9 | 21 | 3 | Up | 1.1 | 0.5 | 7 | 2 |
| **PKP2** | Up | 0.1 | 0.9 | 14 | 2 | Up | 1.1 | 0.1 | 48 | 14 |
| **C16orf88** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.4 | 0.7 | 21 | 10 |
| **LOC100508329** | Up | 0.4 | 0.7 | 26 | 3 | Up | 0.8 | 0.4 | 22 | 8 |
| **UBE2V1** | Up | 0.3 | 0.4 | 221 | 28 | Up | 0.8 | 0.0 | 134 | 46 |
| **TNFRSF21** | Up | 0.2 | 0.8 | 36 | 5 | Up | 1.0 | 0.0 | 59 | 18 |
| **TXNL4B** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.1 | 0.2 | 25 | 7 |
| **LOC100505688** | Up | 1.1 | 0.5 | 15 | 1 | Up | 0.0 | 1.0 | 15 | 9 |
| **GBP1** | Up | 1.1 | 0.4 | 27 | 2 | Up | 0.1 | 0.8 | 51 | 29 |
| **EED** | Up | 0.8 | 0.5 | 33 | 3 | Up | 0.4 | 0.7 | 17 | 8 |
| **ZBTB38** | Up | 0.8 | 0.1 | 116 | 11 | Up | 0.4 | 0.6 | 28 | 13 |
| **DHDDS** | Up | 0.6 | 0.6 | 20 | 2 | Up | 0.5 | 0.5 | 19 | 8 |
| **BACE1** | Up | 0.6 | 0.4 | 67 | 7 | Up | 0.6 | 0.2 | 74 | 31 |
| **MTFMT** | Up | 1.1 | 0.1 | 82 | 6 | Up | 0.0 | 1.0 | 35 | 21 |
| **COX10** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.2 | 0.8 | 17 | 9 |
| **POLR2B** | Up | 0.9 | 0.3 | 58 | 5 | Up | 0.3 | 0.6 | 49 | 25 |
| **KPNA3** | Up | 0.8 | 0.3 | 54 | 5 | Up | 0.4 | 0.5 | 38 | 18 |
| **BANF1** | Up | 0.1 | 0.8 | 82 | 12 | Up | 1.0 | 0.0 | 83 | 25 |
| **ITIH5** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.1 | 0.2 | 21 | 6 |
| **SNRPD2** | Up | 0.4 | 0.1 | 371 | 44 | Up | 0.7 | 0.1 | 88 | 33 |
| **LOC100131541** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.7 | 0.5 | 11 | 4 |
| **SPTLC1** | Up | 1.1 | 0.1 | 80 | 6 | Up | 0.1 | 0.9 | 34 | 20 |
| **UNG** | Up | 0.1 | 0.9 | 20 | 3 | Up | 1.1 | 0.0 | 55 | 16 |
| **GALNT4** | Up | 0.7 | 0.5 | 32 | 3 | Up | 0.4 | 0.7 | 13 | 6 |
| **KIF20B** | Up | 0.5 | 0.7 | 18 | 2 | Up | 0.7 | 0.5 | 13 | 5 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **GEMIN2** | Up | 1.1 | 0.4 | 28 | 2 | Up | 0.0 | 1.0 | 5 | 3 |
| **ATP6V1H** | Up | 1.1 | 0.4 | 27 | 2 | Up | 0.1 | 0.9 | 36 | 21 |
| **PGD** | Up | 0.7 | 0.2 | 109 | 11 | Up | 0.5 | 0.3 | 63 | 28 |
| **ARHGAP1** | Up | 0.6 | 0.3 | 110 | 12 | Up | 0.6 | 0.2 | 63 | 26 |
| **SNRNP48** | Up | 0.5 | 0.7 | 19 | 2 | Up | 0.6 | 0.8 | 5 | 2 |
| **ADAM15** | Up | 0.9 | 0.4 | 25 | 2 | Up | 0.2 | 0.8 | 35 | 19 |
| **DACH1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.7 | 24 | 12 |
| **HOTAIRM1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.8 | 12 | 6 |
| **LOC400657** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.3 | 0.7 | 22 | 11 |
| **QRICH2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.8 | 12 | 6 |
| **TRPC1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.8 | 18 | 9 |
| **WDR19** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.8 | 16 | 8 |
| **AMN1** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.7 | 0.5 | 16 | 6 |
| **DIAPH1** | Up | 0.9 | 0.3 | 47 | 4 | Up | 0.2 | 0.7 | 40 | 21 |
| **TBC1D30** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.8 | 10 | 5 |
| **NDRG1** | Up | 0.8 | 0.1 | 119 | 11 | Up | 0.3 | 0.2 | 175 | 86 |
| **EXTL2** | Up | 0.5 | 0.7 | 27 | 3 | Up | 0.6 | 0.5 | 15 | 6 |
| **ITPRIP** | Up | 0.3 | 0.7 | 24 | 3 | Up | 0.8 | 0.4 | 17 | 6 |
| **PNO1** | Up | 0.3 | 0.7 | 24 | 3 | Up | 0.8 | 0.1 | 56 | 20 |
| **LOC100510011** | Up | 0.3 | 0.8 | 16 | 2 | Up | 0.8 | 0.2 | 37 | 13 |
| **LOC100287541** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.9 | 0.5 | 12 | 4 |
| **FGD1** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.2 | 0.9 | 11 | 6 |
| **ADAMTSL3** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.7 | 0.6 | 8 | 3 |
| **COL6A4P2** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.7 | 0.6 | 8 | 3 |
| **NID2** | Up | 0.0 | 1.0 | 25 | 4 | Up | 1.1 | 0.3 | 18 | 5 |
| **CHST7** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **LOC100507322** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.3 | 0.9 | 6 | 3 |
| **ZNF594** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 6 | 3 |
| **ZNF684** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 6 | 3 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **PDAP1** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.7 | 0.2 | 45 | 17 |
| **BMPER** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **C6orf163** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **FAM123A** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **GOLGA8E** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **INCENP** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **LOC100289561** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **MIPEPP3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **QRFPR** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **TMEM189-UBE2V1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.9 | 4 | 2 |
| **ZNF219** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.7 | 37 | 19 |
| **C22orf28** | Up | 0.8 | 0.1 | 184 | 17 | Up | 0.3 | 0.6 | 52 | 26 |
| **LOC147670** | Up | 0.5 | 0.7 | 19 | 2 | Up | 0.5 | 0.6 | 12 | 5 |
| **TRAF6** | Up | 0.2 | 0.8 | 15 | 2 | Up | 0.9 | 0.3 | 21 | 7 |
| **EIF4B** | Up | 0.9 | 0.0 | 296 | 25 | Up | 0.2 | 0.7 | 123 | 68 |
| **BICD2** | Up | 0.9 | 0.5 | 24 | 2 | Up | 0.2 | 0.8 | 41 | 22 |
| **NEK3** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.5 | 0.6 | 14 | 6 |
| **H6PD** | Up | 0.5 | 0.6 | 37 | 4 | Up | 0.5 | 0.3 | 52 | 22 |
| **TMEM53** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.7 | 0.4 | 21 | 8 |
| **SPTLC2** | Up | 0.3 | 0.6 | 113 | 15 | Up | 0.8 | 0.1 | 77 | 27 |
| **PDCD6IP** | Up | 0.2 | 0.7 | 93 | 13 | Up | 0.9 | 0.1 | 66 | 22 |
| **MAX** | Up | 0.8 | 0.5 | 23 | 2 | Up | 0.3 | 0.6 | 68 | 35 |
| **PGAP3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.3 | 0.7 | 33 | 17 |
| **FUT1** | Up | 0.7 | 0.6 | 21 | 2 | Up | 0.4 | 0.7 | 17 | 8 |
| **SLC41A2** | Up | 0.7 | 0.5 | 31 | 3 | Up | 0.4 | 0.7 | 17 | 8 |
| **PDCD5** | Up | 0.1 | 0.9 | 21 | 3 | Up | 0.9 | 0.3 | 22 | 7 |
| **BTN3A2** | Up | 1.1 | 0.4 | 27 | 2 | Up | 0.0 | 1.0 | 36 | 22 |
| **FANCD2** | Up | 0.9 | 0.5 | 24 | 2 | Up | 0.2 | 0.9 | 13 | 7 |
| **GNPTAB** | Up | 0.9 | 0.4 | 35 | 3 | Up | 0.2 | 0.8 | 30 | 16 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **BCL2L11** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.2 | 0.8 | 25 | 13 |
| **PRADC1** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.4 | 0.7 | 19 | 9 |
| **RPL27** | Up | 0.6 | 0.1 | 295 | 32 | Up | 0.5 | 0.1 | 145 | 63 |
| **DESI1** | Up | 0.1 | 0.9 | 14 | 2 | Up | 1.0 | 0.1 | 60 | 19 |
| **SHANK2-AS3** | Up | 1.0 | 0.2 | 51 | 4 | Up | 0.1 | 0.9 | 59 | 35 |
| **P4HA2** | Up | 0.8 | 0.2 | 79 | 7 | Up | 0.2 | 0.8 | 34 | 18 |
| **ANGPTL7** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **C15orf37** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **C1QA** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.7 | 46 | 24 |
| **ESRRB** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **HEATR4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **HSFY1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LINC00452** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC100130698** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC100132272** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC100509247** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC100652839** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **LOC339894** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **PKD1L1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **RPS10P7** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **RXFP1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **SPDYE2L** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **ZNF155** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 2 | 1 |
| **MAP1LC3B** | Up | 0.8 | 0.1 | 130 | 12 | Up | 0.3 | 0.5 | 82 | 42 |
| **STON2** | Up | 0.8 | 0.3 | 75 | 7 | Up | 0.3 | 0.8 | 18 | 9 |
| **CENPJ** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.5 | 0.8 | 7 | 3 |
| **LOC728758** | Up | 0.5 | 0.7 | 19 | 2 | Up | 0.5 | 0.5 | 21 | 9 |
| **SEPT8** | Up | 0.4 | 0.7 | 33 | 4 | Up | 0.7 | 0.1 | 89 | 34 |
| **LOC100506948** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.9 | 0.3 | 19 | 6 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **S100A16** | Up | 0.0 | 0.9 | 174 | 27 | Up | 1.0 | 0.0 | 92 | 28 |
| **ANAPC11** | Up | 0.0 | 1.0 | 38 | 6 | Up | 1.1 | 0.0 | 81 | 24 |
| **LOC100506486** | Up | 1.0 | 0.5 | 14 | 1 | Up | 0.0 | 1.0 | 18 | 11 |
| **ZDHHC6** | Up | 0.9 | 0.4 | 25 | 2 | Up | 0.1 | 0.9 | 35 | 20 |
| **LARP4B** | Up | 0.9 | 0.2 | 80 | 7 | Up | 0.2 | 0.7 | 81 | 44 |
| **LOC645166** | Up | 0.8 | 0.5 | 22 | 2 | Up | 0.3 | 0.8 | 8 | 4 |
| **PTRF** | Up | 0.6 | 0.0 | 342 | 36 | Up | 0.4 | 0.3 | 62 | 28 |
| **SCN3B** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.6 | 0.3 | 33 | 13 |
| **DUSP18** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.8 | 0.4 | 20 | 7 |
| **TUBGCP3** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.8 | 0.4 | 20 | 7 |
| **USP1** | Up | 0.2 | 0.8 | 15 | 2 | Up | 0.8 | 0.2 | 32 | 11 |
| **E2F3** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.9 | 0.3 | 25 | 8 |
| **GAS5** | Up | 0.0 | 0.9 | 102 | 16 | Up | 1.0 | 0.0 | 116 | 35 |
| **ZNF347** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.1 | 0.9 | 14 | 8 |
| **SEMA6C** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.8 | 17 | 9 |
| **S1PR2** | Up | 0.6 | 0.6 | 29 | 3 | Up | 0.4 | 0.5 | 31 | 14 |
| **PDP2** | Up | 0.4 | 0.5 | 68 | 8 | Up | 0.6 | 0.2 | 62 | 25 |
| **RBL2** | Up | 0.4 | 0.7 | 25 | 3 | Up | 0.7 | 0.3 | 46 | 18 |
| **AP3M1** | Up | 1.0 | 0.0 | 139 | 11 | Up | 0.0 | 1.0 | 54 | 33 |
| **COX18** | Up | 0.5 | 0.6 | 28 | 3 | Up | 0.5 | 0.5 | 32 | 14 |
| **THAP6** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.6 | 0.4 | 25 | 10 |
| **ABCC5** | Up | 0.3 | 0.8 | 16 | 2 | Up | 0.7 | 0.1 | 70 | 26 |
| **XRN2** | Up | 0.2 | 0.7 | 87 | 12 | Up | 0.8 | 0.2 | 43 | 15 |
| **DPH5** | Up | 0.1 | 0.9 | 28 | 4 | Up | 0.9 | 0.2 | 39 | 13 |
| **PPP3CC** | Up | 0.1 | 0.9 | 7 | 1 | Up | 1.0 | 0.2 | 29 | 9 |
| **C11orf96** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.6 | 110 | 59 |
| **DHRS12** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.8 | 28 | 15 |
| **KLHDC8B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.8 | 26 | 14 |
| **PCID2** | Up | 0.4 | 0.7 | 25 | 3 | Up | 0.6 | 0.3 | 38 | 15 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **AGFG1** | Up | 0.3 | 0.7 | 53 | 7 | Up | 0.8 | 0.1 | 82 | 30 |
| **HIATL1** | Up | 0.3 | 0.7 | 60 | 8 | Up | 0.8 | 0.2 | 47 | 17 |
| **C17orf49** | Up | 0.0 | 1.0 | 32 | 5 | Up | 1.0 | 0.1 | 36 | 11 |
| **ACAT1** | Up | 0.8 | 0.4 | 34 | 3 | Up | 0.2 | 0.9 | 13 | 7 |
| **CPXM2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 13 | 7 |
| **SAC3D1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 13 | 7 |
| **ACTR3** | Up | 0.7 | 0.1 | 186 | 18 | Up | 0.3 | 0.5 | 75 | 38 |
| **MEAF6** | Up | 0.5 | 0.7 | 18 | 2 | Up | 0.5 | 0.3 | 54 | 23 |
| **TMEM98** | Up | 0.3 | 0.7 | 40 | 5 | Up | 0.7 | 0.2 | 52 | 20 |
| **MYEF2** | Up | 0.3 | 0.7 | 24 | 3 | Up | 0.7 | 0.2 | 47 | 18 |
| **SLC7A14** | Up | 0.3 | 0.7 | 39 | 5 | Up | 0.7 | 0.2 | 53 | 20 |
| **FBXL18** | Up | 0.3 | 0.7 | 54 | 7 | Up | 0.7 | 0.2 | 56 | 21 |
| **CPT1C** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.8 | 22 | 12 |
| **ZNF621** | Up | 0.8 | 0.4 | 44 | 4 | Up | 0.2 | 0.7 | 43 | 23 |
| **TIA1** | Up | 0.6 | 0.5 | 48 | 5 | Up | 0.4 | 0.4 | 66 | 31 |
| **RIMKLA** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.6 | 0.5 | 22 | 9 |
| **ATP11C** | Up | 0.3 | 0.7 | 38 | 5 | Up | 0.7 | 0.5 | 11 | 4 |
| **MCPH1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.9 | 0.3 | 19 | 6 |
| **RNF185** | Up | 0.0 | 1.0 | 26 | 4 | Up | 1.0 | 0.1 | 51 | 16 |
| **BRD7** | Up | 0.9 | 0.2 | 59 | 5 | Up | 0.1 | 0.9 | 40 | 23 |
| **SCNM1** | Up | 0.9 | 0.2 | 81 | 7 | Up | 0.1 | 0.9 | 37 | 21 |
| **CACHD1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 11 | 6 |
| **SDR16C5** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 11 | 6 |
| **WNK3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.2 | 0.9 | 11 | 6 |
| **VEZF1** | Up | 0.7 | 0.3 | 62 | 6 | Up | 0.3 | 0.5 | 69 | 35 |
| **SLC38A7** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.3 | 0.8 | 14 | 7 |
| **PIGT** | Up | 0.5 | 0.7 | 19 | 2 | Up | 0.4 | 0.3 | 62 | 28 |
| **SERINC1** | Up | 0.5 | 0.2 | 155 | 17 | Up | 0.4 | 0.2 | 104 | 47 |
| **ZCCHC17** | Up | 0.5 | 0.4 | 73 | 8 | Up | 0.5 | 0.5 | 40 | 18 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **JAM3** | Up | 0.1 | 0.9 | 33 | 5 | Up | 0.9 | 0.2 | 28 | 9 |
| **GTF3C2** | Up | 0.0 | 1.0 | 26 | 4 | Up | 1.0 | 0.1 | 38 | 12 |
| **LYRM1** | Up | 0.9 | 0.4 | 36 | 3 | Up | 0.1 | 0.9 | 36 | 21 |
| **NUBPL** | Up | 0.7 | 0.5 | 32 | 3 | Up | 0.2 | 0.8 | 27 | 14 |
| **UFD1L** | Up | 0.5 | 0.5 | 55 | 6 | Up | 0.4 | 0.5 | 42 | 19 |
| **MDC1** | Up | 0.0 | 1.0 | 13 | 2 | Up | 1.0 | 0.2 | 29 | 9 |
| **CASP8AP2** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.4 | 0.7 | 13 | 6 |
| **YAE1D1** | Up | 0.9 | 0.4 | 37 | 3 | Up | 0.0 | 1.0 | 10 | 6 |
| **C11orf46** | Up | 0.0 | 1.0 | 13 | 2 | Up | 1.0 | 0.3 | 16 | 5 |
| **LOC100509894** | Up | 0.9 | 0.6 | 13 | 1 | Up | 0.0 | 1.0 | 5 | 3 |
| **C1orf115** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.4 | 0.5 | 47 | 22 |
| **IMPA1** | Up | 0.2 | 0.8 | 42 | 6 | Up | 0.8 | 0.4 | 20 | 7 |
| **CTDP1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 0.9 | 9 | 5 |
| **PRAP1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 0.9 | 9 | 5 |
| **SUN3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 0.9 | 9 | 5 |
| **IQGAP1** | Up | 0.7 | 0.0 | 249 | 24 | Up | 0.2 | 0.6 | 72 | 38 |
| **C10orf88** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.5 | 0.6 | 12 | 5 |
| **ERI1** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.5 | 0.6 | 12 | 5 |
| **COIL** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.4 | 0.7 | 17 | 8 |
| **ZKSCAN3** | Up | 0.7 | 0.5 | 40 | 4 | Up | 0.3 | 0.7 | 30 | 15 |
| **C17orf76-AS1** | Up | 0.6 | 0.1 | 215 | 23 | Up | 0.4 | 0.3 | 132 | 63 |
| **TNFRSF1A** | Up | 0.3 | 0.8 | 16 | 2 | Up | 0.6 | 0.2 | 56 | 22 |
| **KIAA1549** | Up | 0.9 | 0.5 | 24 | 2 | Up | 0.1 | 1.0 | 22 | 13 |
| **UFC1** | Up | 0.8 | 0.1 | 170 | 16 | Up | 0.2 | 0.7 | 66 | 36 |
| **AGPAT5** | Up | 0.8 | 0.4 | 45 | 4 | Up | 0.1 | 0.9 | 30 | 17 |
| **FAHD1** | Up | 0.3 | 0.7 | 24 | 3 | Up | 0.6 | 0.4 | 30 | 12 |
| **ZMYM4** | Up | 0.2 | 0.8 | 30 | 4 | Up | 0.7 | 0.3 | 37 | 14 |
| **DEGS1** | Up | 0.7 | 0.3 | 90 | 9 | Up | 0.3 | 0.7 | 35 | 18 |
| **LOC100505863** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.7 | 0.6 | 8 | 3 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CCDC56** | Up | 0.1 | 0.9 | 21 | 3 | Up | 0.8 | 0.1 | 51 | 18 |
| **GPR37L1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.9 | 0.3 | 24 | 8 |
| **ZFP36L2** | Up | 0.8 | 0.1 | 167 | 15 | Up | 0.1 | 0.7 | 208 | 120 |
| **KCNIP2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 0.9 | 14 | 8 |
| **NME3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 0.9 | 35 | 20 |
| **SH3KBP1** | Up | 0.8 | 0.5 | 23 | 2 | Up | 0.1 | 0.9 | 42 | 24 |
| **WASF3** | Up | 0.0 | 1.0 | 25 | 4 | Up | 1.0 | 0.1 | 41 | 13 |
| **H3F3AP4** | Up | 0.0 | 1.0 | 32 | 5 | Up | 0.9 | 0.1 | 52 | 17 |
| **LOC100506392** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **SLC8A3** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **ZNF34** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 0.9 | 7 | 4 |
| **FASTKD1** | Up | 0.6 | 0.6 | 20 | 2 | Up | 0.3 | 0.8 | 12 | 6 |
| **LEMD3** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.3 | 0.6 | 29 | 14 |
| **LOC100652805** | Up | 0.6 | 0.4 | 69 | 7 | Up | 0.3 | 0.7 | 37 | 19 |
| **GCFC1** | Up | 0.1 | 0.9 | 21 | 3 | Up | 0.8 | 0.3 | 28 | 10 |
| **NUDCD2** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.8 | 0.2 | 34 | 12 |
| **ARHGAP10** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.9 | 0.5 | 9 | 3 |
| **WDSUB1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 0.9 | 19 | 11 |
| **C6orf203** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.5 | 0.8 | 7 | 3 |
| **CBWD3** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.5 | 0.8 | 7 | 3 |
| **ATG14** | Up | 0.3 | 0.7 | 32 | 4 | Up | 0.6 | 0.4 | 29 | 12 |
| **EIF4G2** | Up | 0.3 | 0.1 | 596 | 76 | Up | 0.6 | 0.0 | 161 | 67 |
| **PDIA6** | Up | 0.5 | 0.0 | 402 | 45 | Up | 0.4 | 0.3 | 118 | 56 |
| **LOC152217** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.7 | 0.5 | 18 | 7 |
| **RSPH1** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 1.0 | 12 | 7 |
| **TJP1** | Up | 0.5 | 0.3 | 140 | 16 | Up | 0.4 | 0.5 | 50 | 23 |
| **IAPP** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.5 | 0.6 | 16 | 7 |
| **NTPCR** | Up | 0.5 | 0.7 | 19 | 2 | Up | 0.3 | 0.6 | 29 | 14 |
| **ZXDC** | Up | 0.9 | 0.3 | 46 | 4 | Up | 0.0 | 1.0 | 78 | 47 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RPL35A** | Up | 0.8 | 0.0 | 237 | 22 | Up | 0.1 | 0.8 | 108 | 62 |
| **TROVE2** | Up | 0.4 | 0.6 | 72 | 9 | Up | 0.5 | 0.4 | 40 | 17 |
| **MRP63** | Up | 0.3 | 0.7 | 31 | 4 | Up | 0.6 | 0.3 | 42 | 17 |
| **CTR9** | Up | 0.3 | 0.7 | 45 | 6 | Up | 0.6 | 0.3 | 43 | 17 |
| **SH3BP2** | Up | 0.9 | 0.2 | 80 | 7 | Up | 0.0 | 1.0 | 74 | 45 |
| **SDCBP2** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.1 | 1.0 | 22 | 13 |
| **PEAK1** | Up | 0.7 | 0.4 | 50 | 5 | Up | 0.2 | 0.8 | 32 | 17 |
| **PHF15** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.5 | 0.5 | 27 | 12 |
| **DCTN5** | Up | 0.4 | 0.6 | 50 | 6 | Up | 0.5 | 0.5 | 34 | 15 |
| **LOC100653061** | Up | 0.3 | 0.8 | 23 | 3 | Up | 0.6 | 0.5 | 15 | 6 |
| **NDUFB6** | Up | 0.2 | 0.8 | 30 | 4 | Up | 0.6 | 0.3 | 38 | 15 |
| **LOC146880** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.2 | 0.8 | 37 | 20 |
| **C14orf166** | Up | 0.5 | 0.4 | 121 | 14 | Up | 0.4 | 0.4 | 56 | 26 |
| **RNF4** | Up | 0.9 | 0.3 | 46 | 4 | Up | 0.0 | 1.0 | 41 | 25 |
| **DNAL1** | Up | 0.8 | 0.4 | 43 | 4 | Up | 0.1 | 0.8 | 81 | 46 |
| **COMMD7** | Up | 0.7 | 0.5 | 32 | 3 | Up | 0.1 | 0.8 | 57 | 32 |
| **URI1** | Up | 0.6 | 0.6 | 20 | 2 | Up | 0.2 | 0.6 | 56 | 29 |
| **IL13RA1** | Up | 0.4 | 0.5 | 100 | 12 | Up | 0.5 | 0.3 | 67 | 30 |
| **FLI1** | Up | 0.4 | 0.6 | 58 | 7 | Up | 0.5 | 0.5 | 25 | 11 |
| **MEGF8** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.3 | 0.7 | 34 | 17 |
| **THUMPD3** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.3 | 0.6 | 36 | 18 |
| **WDR20** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.5 | 0.5 | 27 | 12 |
| **SNX30** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.0 | 1.0 | 20 | 12 |
| **LOC100653041** | Up | 0.5 | 0.7 | 27 | 3 | Up | 0.4 | 0.7 | 21 | 10 |
| **SPN** | Up | 0.5 | 0.6 | 44 | 5 | Up | 0.4 | 0.5 | 55 | 26 |
| **PPP1R13B** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.4 | 0.5 | 31 | 14 |
| **PCGF6** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.3 | 0.8 | 8 | 4 |
| **DKK3** | Up | 0.5 | 0.4 | 81 | 9 | Up | 0.3 | 0.5 | 59 | 29 |
| **NDUFV3** | Up | 0.4 | 0.6 | 42 | 5 | Up | 0.4 | 0.4 | 53 | 24 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **ZNF418** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.8 | 0.7 | 3 | 1 |
| **GRIN2D** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LOC100506250** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LOC100506753** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LOC100508869** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **LOC150935** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **PBX4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **RNF113B** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.0 | 1.0 | 5 | 3 |
| **NIN** | Up | 0.8 | 0.5 | 22 | 2 | Up | 0.1 | 0.9 | 31 | 18 |
| **FAM188A** | Up | 0.3 | 0.8 | 23 | 3 | Up | 0.6 | 0.5 | 22 | 9 |
| **SGTB** | Up | 0.8 | 0.3 | 65 | 6 | Up | 0.1 | 1.0 | 27 | 16 |
| **LOC100505815** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.3 | 0.9 | 6 | 3 |
| **ZDHHC20** | Up | 0.5 | 0.7 | 19 | 2 | Up | 0.3 | 0.7 | 22 | 11 |
| **ZNF587** | Up | 0.4 | 0.7 | 33 | 4 | Up | 0.5 | 0.5 | 36 | 16 |
| **CCNYL1** | Up | 0.2 | 0.8 | 49 | 7 | Up | 0.7 | 0.4 | 21 | 8 |
| **IKZF4** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.0 | 1.0 | 23 | 14 |
| **PIK3R4** | Up | 0.8 | 0.6 | 12 | 1 | Up | 0.0 | 1.0 | 28 | 17 |
| **LOC100506705** | Up | 0.7 | 0.5 | 32 | 3 | Up | 0.1 | 0.9 | 21 | 12 |
| **TCF19** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.1 | 0.9 | 18 | 10 |
| **EIF4G3** | Up | 0.5 | 0.6 | 44 | 5 | Up | 0.4 | 0.5 | 46 | 22 |
| **RCBTB2** | Up | 0.8 | 0.5 | 22 | 2 | Up | 0.1 | 1.0 | 17 | 10 |
| **ACSL5** | Up | 0.7 | 0.5 | 40 | 4 | Up | 0.2 | 0.8 | 33 | 18 |
| **VAMP3** | Up | 0.6 | 0.2 | 107 | 11 | Up | 0.2 | 0.7 | 52 | 28 |
| **RECK** | Up | 0.5 | 0.7 | 19 | 2 | Up | 0.3 | 0.8 | 10 | 5 |
| **GNAS** | Up | 0.1 | 0.8 | 386 | 59 | Up | 0.8 | 0.0 | 568 | 207 |
| **IL17D** | Up | 0.8 | 0.7 | 1 | 0 | Up | 0.0 | 1.0 | 18 | 11 |
| **MED20** | Up | 0.6 | 0.5 | 39 | 4 | Up | 0.2 | 0.8 | 17 | 9 |
| **TIMM9** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.4 | 0.6 | 26 | 12 |
| **SEC31A** | Up | 0.3 | 0.5 | 201 | 27 | Up | 0.6 | 0.2 | 70 | 29 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **LANCL2** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.6 | 0.3 | 56 | 23 |
| **RPP21** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.6 | 0.5 | 22 | 9 |
| **PSMA6** | Up | 0.1 | 0.7 | 283 | 42 | Up | 0.7 | 0.0 | 115 | 43 |
| **LOC100510007** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.4 | 0.7 | 11 | 5 |
| **ARHGEF7** | Up | 0.2 | 0.8 | 22 | 3 | Up | 0.6 | 0.2 | 55 | 22 |
| **IGFBP7** | Up | 0.2 | 0.6 | 239 | 34 | Up | 0.6 | 0.1 | 99 | 39 |
| **POLD3** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.1 | 0.9 | 16 | 9 |
| **TOP1** | Up | 0.8 | 0.3 | 55 | 5 | Up | 0.0 | 1.0 | 46 | 28 |
| **NSRP1** | Up | 0.4 | 0.6 | 50 | 6 | Up | 0.4 | 0.6 | 28 | 13 |
| **PHF3** | Up | 0.2 | 0.8 | 15 | 2 | Up | 0.6 | 0.3 | 37 | 15 |
| **ATP5L** | Up | 0.8 | 0.0 | 308 | 29 | Up | 0.0 | 0.9 | 80 | 48 |
| **GOPC** | Up | 0.7 | 0.5 | 40 | 4 | Up | 0.1 | 0.8 | 45 | 25 |
| **ARHGAP31** | Up | 0.4 | 0.6 | 43 | 5 | Up | 0.4 | 0.7 | 23 | 11 |
| **GSPT1** | Up | 0.4 | 0.6 | 81 | 10 | Up | 0.4 | 0.3 | 81 | 37 |
| **PIP5K1A** | Up | 0.3 | 0.8 | 16 | 2 | Up | 0.5 | 0.4 | 39 | 17 |
| **SRFBP1** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.7 | 0.6 | 8 | 3 |
| **LOC100652922** | Up | 0.1 | 0.9 | 34 | 5 | Up | 0.7 | 0.3 | 29 | 11 |
| **CENPN** | Up | 0.8 | 0.2 | 85 | 8 | Up | 0.0 | 1.0 | 30 | 18 |
| **PHF6** | Up | 0.6 | 0.6 | 20 | 2 | Up | 0.2 | 0.9 | 11 | 6 |
| **TBC1D20** | Up | 0.6 | 0.6 | 29 | 3 | Up | 0.2 | 0.8 | 41 | 22 |
| **OCIAD1** | Up | 0.5 | 0.5 | 55 | 6 | Up | 0.3 | 0.6 | 60 | 31 |
| **RTTN** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.7 | 0.5 | 11 | 4 |
| **NR5A2** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.1 | 0.9 | 7 | 4 |
| **ABCD4** | Up | 0.8 | 0.5 | 22 | 2 | Up | 0.0 | 1.0 | 41 | 25 |
| **TFDP2** | Up | 0.7 | 0.2 | 94 | 9 | Up | 0.0 | 0.9 | 97 | 58 |
| **LOC100507437** | Up | 0.4 | 0.7 | 41 | 5 | Up | 0.4 | 0.7 | 13 | 6 |
| **TPTE2P1** | Up | 0.7 | 0.6 | 21 | 2 | Up | 0.1 | 0.9 | 31 | 18 |
| **RAB13** | Up | 0.8 | 0.1 | 116 | 11 | Up | 0.0 | 1.0 | 36 | 22 |
| **GOSR1** | Up | 0.6 | 0.4 | 68 | 7 | Up | 0.1 | 0.8 | 45 | 25 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MLLT10** | Up | 0.3 | 0.8 | 16 | 2 | Up | 0.5 | 0.5 | 36 | 16 |
| **TRMT112** | Up | 0.3 | 0.7 | 62 | 8 | Up | 0.5 | 0.3 | 72 | 32 |
| **PAICS** | Up | 0.2 | 0.7 | 96 | 13 | Up | 0.5 | 0.2 | 87 | 37 |
| **TPR** | Up | 0.2 | 0.8 | 71 | 10 | Up | 0.6 | 0.3 | 44 | 18 |
| **PLEKHA1** | Up | 0.8 | 0.2 | 95 | 9 | Up | 0.0 | 1.0 | 31 | 19 |
| **VHL** | Up | 0.7 | 0.3 | 70 | 7 | Up | 0.1 | 0.9 | 40 | 23 |
| **CAPN2** | Up | 0.5 | 0.1 | 266 | 30 | Up | 0.3 | 0.5 | 91 | 47 |
| **ZNF502** | Up | 0.5 | 0.7 | 18 | 2 | Up | 0.3 | 0.8 | 8 | 4 |
| **C15orf23** | Up | 0.4 | 0.6 | 42 | 5 | Up | 0.4 | 0.7 | 23 | 11 |
| **TSPYL5** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.4 | 0.7 | 21 | 10 |
| **SEC61A2** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.5 | 0.5 | 28 | 12 |
| **SLC35F1** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.4 | 0.7 | 25 | 12 |
| **IMMT** | Up | 0.4 | 0.6 | 88 | 11 | Up | 0.4 | 0.5 | 47 | 22 |
| **ILF2** | Up | 0.1 | 0.8 | 182 | 27 | Up | 0.6 | 0.1 | 116 | 46 |
| **YPEL2** | Up | 0.6 | 0.3 | 102 | 11 | Up | 0.2 | 0.8 | 22 | 12 |
| **SLFN12** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.7 | 0.6 | 8 | 3 |
| **ZBTB2** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.7 | 0.6 | 8 | 3 |
| **GATC** | Up | 0.7 | 0.2 | 110 | 11 | Up | 0.1 | 0.9 | 63 | 37 |
| **LOC100506291** | Up | 0.6 | 0.5 | 30 | 3 | Up | 0.1 | 0.9 | 7 | 4 |
| **SEPT2** | Up | 0.5 | 0.2 | 274 | 32 | Up | 0.3 | 0.3 | 158 | 80 |
| **INTS8** | Up | 0.1 | 0.9 | 27 | 4 | Up | 0.7 | 0.5 | 18 | 7 |
| **FAM178A** | Up | 0.1 | 0.9 | 21 | 3 | Up | 0.6 | 0.4 | 32 | 13 |
| **TMEM62** | Up | 0.0 | 1.0 | 13 | 2 | Up | 0.7 | 0.3 | 35 | 13 |
| **C10orf28** | Up | 0.7 | 0.7 | 11 | 1 | Up | 0.0 | 1.0 | 5 | 3 |
| **ZNF614** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.7 | 0.5 | 18 | 7 |
| **GTF2H2C** | Up | 0.5 | 0.7 | 18 | 2 | Up | 0.2 | 0.8 | 23 | 12 |
| **WLS** | Up | 0.3 | 0.7 | 32 | 4 | Up | 0.4 | 0.5 | 40 | 19 |
| **SYNRG** | Up | 0.3 | 0.7 | 47 | 6 | Up | 0.4 | 0.4 | 64 | 30 |
| **RANBP9** | Up | 0.3 | 0.7 | 31 | 4 | Up | 0.4 | 0.5 | 48 | 22 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **MORF4L2** | Up | 0.0 | 1.0 | 158 | 25 | Up | 0.7 | 0.0 | 121 | 46 |
| **C2CD2** | Up | 0.5 | 0.7 | 19 | 2 | Up | 0.2 | 0.9 | 20 | 11 |
| **TM7SF3** | Up | 0.6 | 0.5 | 47 | 5 | Up | 0.1 | 0.8 | 71 | 40 |
| **PHKB** | Up | 0.5 | 0.5 | 61 | 7 | Up | 0.2 | 0.7 | 40 | 21 |
| **AP1AR** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.3 | 0.8 | 12 | 6 |
| **CDC123** | Up | 0.6 | 0.4 | 68 | 7 | Up | 0.1 | 0.9 | 59 | 35 |
| **RPL30** | Up | 0.5 | 0.2 | 182 | 20 | Up | 0.1 | 0.7 | 167 | 94 |
| **EXOC1** | Up | 0.5 | 0.6 | 35 | 4 | Up | 0.2 | 0.8 | 32 | 17 |
| **ATG3** | Up | 0.5 | 0.4 | 114 | 13 | Up | 0.2 | 0.7 | 54 | 29 |
| **ZNF716** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.3 | 0.9 | 4 | 2 |
| **MYEOV2** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.4 | 0.6 | 22 | 10 |
| **TYSND1** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.4 | 0.6 | 22 | 10 |
| **CHD1L** | Up | 0.2 | 0.8 | 22 | 3 | Up | 0.5 | 0.5 | 32 | 14 |
| **ZNF644** | Up | 0.7 | 0.3 | 79 | 8 | Up | 0.0 | 1.0 | 23 | 14 |
| **HOGA1** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.1 | 0.9 | 21 | 12 |
| **MEFV** | Up | 0.6 | 0.5 | 30 | 3 | Up | 0.0 | 1.0 | 23 | 14 |
| **NDUFA13** | Up | 0.5 | 0.5 | 55 | 6 | Up | 0.1 | 0.8 | 46 | 26 |
| **KRCC1** | Up | 0.3 | 0.7 | 24 | 3 | Up | 0.3 | 0.6 | 35 | 17 |
| **PSMC1** | Up | 0.3 | 0.4 | 264 | 34 | Up | 0.3 | 0.5 | 70 | 34 |
| **LOC100507246** | Up | 0.4 | 0.4 | 133 | 16 | Up | 0.2 | 0.6 | 81 | 42 |
| **ARMCX4** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.4 | 0.6 | 26 | 12 |
| **RNF135** | Up | 0.6 | 0.6 | 29 | 3 | Up | 0.1 | 1.0 | 22 | 13 |
| **MT1L** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.2 | 0.9 | 2 | 1 |
| **CYFIP1** | Up | 0.2 | 0.8 | 30 | 4 | Up | 0.4 | 0.4 | 73 | 34 |
| **C5orf51** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.2 | 0.8 | 19 | 10 |
| **ENOX2** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.2 | 0.8 | 19 | 10 |
| **DUSP12** | Up | 0.2 | 0.8 | 15 | 2 | Up | 0.4 | 0.6 | 24 | 11 |
| **LOC100506691** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.6 | 0.8 | 5 | 2 |
| **LINC00338** | Up | 0.0 | 1.0 | 19 | 3 | Up | 0.7 | 0.5 | 18 | 7 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **RNF38** | Up | 0.5 | 0.6 | 37 | 4 | Up | 0.1 | 0.9 | 38 | 22 |
| **HTATIP2** | Up | 0.2 | 0.8 | 71 | 10 | Up | 0.4 | 0.5 | 42 | 19 |
| **SRRM1** | Up | 0.6 | 0.2 | 132 | 14 | Up | 0.0 | 1.0 | 61 | 37 |
| **IKBKAP** | Up | 0.5 | 0.7 | 27 | 3 | Up | 0.1 | 0.9 | 23 | 13 |
| **LOC100507106** | Up | 0.5 | 0.7 | 18 | 2 | Up | 0.1 | 0.9 | 18 | 10 |
| **TMTC1** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.2 | 0.7 | 59 | 31 |
| **PELI1** | Up | 0.1 | 0.9 | 27 | 4 | Up | 0.5 | 0.5 | 19 | 8 |
| **MELK** | Up | 0.0 | 1.0 | 26 | 4 | Up | 0.6 | 0.8 | 5 | 2 |
| **EXOSC8** | Up | 0.3 | 0.5 | 111 | 14 | Up | 0.3 | 0.6 | 47 | 24 |
| **TTC39C** | Up | 0.3 | 0.7 | 46 | 6 | Up | 0.3 | 0.5 | 55 | 27 |
| **MYO1B** | Up | 0.3 | 0.7 | 53 | 7 | Up | 0.3 | 0.5 | 64 | 31 |
| **DDX3X** | Up | 0.5 | 0.3 | 174 | 20 | Up | 0.1 | 0.8 | 73 | 41 |
| **C3orf38** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.2 | 0.9 | 15 | 8 |
| **PARK7** | Up | 0.3 | 0.4 | 289 | 38 | Up | 0.3 | 0.4 | 89 | 44 |
| **KBTBD12** | Up | 0.6 | 0.6 | 29 | 3 | Up | 0.0 | 1.0 | 18 | 11 |
| **CASP10** | Up | 0.5 | 0.7 | 27 | 3 | Up | 0.1 | 0.9 | 21 | 12 |
| **ACAD8** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.4 | 0.7 | 23 | 11 |
| **C15orf24** | Up | 0.1 | 0.9 | 34 | 5 | Up | 0.5 | 0.3 | 62 | 27 |
| **LOC100131096** | Up | 0.6 | 0.7 | 10 | 1 | Up | 0.0 | 1.0 | 10 | 6 |
| **SMC4** | Up | 0.3 | 0.6 | 71 | 9 | Up | 0.3 | 0.7 | 35 | 18 |
| **NUP85** | Up | 0.2 | 0.8 | 36 | 5 | Up | 0.4 | 0.5 | 43 | 20 |
| **C5orf30** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.5 | 0.5 | 26 | 11 |
| **DOCK6** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.3 | 0.6 | 39 | 19 |
| **LOC100128252** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.3 | 0.6 | 35 | 17 |
| **ESYT1** | Up | 0.1 | 0.8 | 68 | 10 | Up | 0.5 | 0.4 | 45 | 20 |
| **AKAP5** | Up | 0.1 | 0.9 | 20 | 3 | Up | 0.5 | 0.5 | 21 | 9 |
| **ZNF554** | Up | 0.1 | 0.9 | 20 | 3 | Up | 0.5 | 0.5 | 21 | 9 |
| **DCUN1D2** | Up | 0.4 | 0.6 | 58 | 7 | Up | 0.2 | 0.7 | 64 | 35 |
| **FOXN3** | Up | 0.3 | 0.7 | 62 | 8 | Up | 0.3 | 0.6 | 72 | 37 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **COX4I1** | Up | 0.3 | 0.4 | 284 | 38 | Up | 0.3 | 0.4 | 110 | 55 |
| **XPO1** | Up | 0.2 | 0.8 | 78 | 11 | Up | 0.4 | 0.5 | 49 | 23 |
| **LOC100507669** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.5 | 0.7 | 9 | 4 |
| **PPP2CB** | Up | 0.5 | 0.4 | 99 | 11 | Up | 0.0 | 0.9 | 70 | 42 |
| **TDRD3** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.1 | 0.9 | 18 | 10 |
| **CTSK** | Up | 0.1 | 0.9 | 20 | 3 | Up | 0.5 | 0.2 | 78 | 34 |
| **FES** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.1 | 0.9 | 9 | 5 |
| **ATP6V0A2** | Up | 0.1 | 0.9 | 65 | 10 | Up | 0.5 | 0.3 | 62 | 27 |
| **SH3RF1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.5 | 0.5 | 23 | 10 |
| **EFNA1** | Up | 0.3 | 0.7 | 53 | 7 | Up | 0.3 | 0.6 | 59 | 30 |
| **BMS1P5** | Up | 0.2 | 0.8 | 30 | 4 | Up | 0.3 | 0.8 | 12 | 6 |
| **C10orf111** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.3 | 0.7 | 24 | 12 |
| **EPHA10** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.3 | 0.8 | 14 | 7 |
| **SF3B3** | Up | 0.2 | 0.6 | 153 | 21 | Up | 0.3 | 0.4 | 105 | 52 |
| **PPP1R8** | Up | 0.5 | 0.7 | 27 | 3 | Up | 0.0 | 1.0 | 20 | 12 |
| **UBA52** | Up | 0.4 | 0.3 | 193 | 23 | Up | 0.1 | 0.8 | 141 | 81 |
| **EDC3** | Up | 0.4 | 0.7 | 25 | 3 | Up | 0.1 | 0.8 | 43 | 24 |
| **EIF2B2** | Up | 0.3 | 0.7 | 48 | 6 | Up | 0.2 | 0.8 | 37 | 20 |
| **LOC100652950** | Up | 0.1 | 0.9 | 20 | 3 | Up | 0.5 | 0.6 | 18 | 8 |
| **RBBP4** | Up | 0.1 | 0.9 | 72 | 11 | Up | 0.5 | 0.3 | 63 | 28 |
| **CAPN7** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.1 | 0.9 | 23 | 13 |
| **PTGS1** | Up | 0.4 | 0.7 | 25 | 3 | Up | 0.1 | 0.9 | 25 | 14 |
| **FLJ42102** | Up | 0.3 | 0.7 | 45 | 6 | Up | 0.3 | 0.7 | 37 | 19 |
| **LOC100507088** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.3 | 0.9 | 6 | 3 |
| **CBY1** | Up | 0.4 | 0.6 | 42 | 5 | Up | 0.1 | 0.9 | 21 | 12 |
| **FDPS** | Up | 0.4 | 0.1 | 453 | 56 | Up | 0.1 | 0.8 | 89 | 50 |
| **MASTL** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.3 | 0.9 | 4 | 2 |
| **ZNF565** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.3 | 0.9 | 4 | 2 |
| **TMEM246** | Up | 0.2 | 0.8 | 15 | 2 | Up | 0.3 | 0.8 | 18 | 9 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **COPA** | Up | 0.1 | 0.9 | 143 | 22 | Up | 0.5 | 0.3 | 69 | 31 |
| **COG5** | Up | 0.0 | 1.0 | 26 | 4 | Up | 0.5 | 0.5 | 25 | 11 |
| **PLCB4** | Up | 0.0 | 1.0 | 13 | 2 | Up | 0.5 | 0.4 | 37 | 16 |
| **PAIP1** | Up | 0.5 | 0.4 | 112 | 13 | Up | 0.0 | 1.0 | 35 | 21 |
| **WDR12** | Up | 0.5 | 0.6 | 35 | 4 | Up | 0.0 | 1.0 | 20 | 12 |
| **ARID4A** | Up | 0.4 | 0.7 | 26 | 3 | Up | 0.1 | 1.0 | 17 | 10 |
| **LANCL1** | Up | 0.4 | 0.7 | 26 | 3 | Up | 0.1 | 0.9 | 51 | 30 |
| **SS18** | Up | 0.2 | 0.8 | 70 | 10 | Up | 0.3 | 0.5 | 64 | 31 |
| **LOC100652800** | Up | 0.0 | 1.0 | 431 | 69 | Up | 0.5 | 0.0 | 250 | 109 |
| **NEK9** | Up | 0.0 | 1.0 | 19 | 3 | Up | 0.5 | 0.3 | 58 | 25 |
| **RRAGA** | Up | 0.5 | 0.6 | 35 | 4 | Up | 0.0 | 1.0 | 53 | 32 |
| **TMEM127** | Up | 0.1 | 0.9 | 27 | 4 | Up | 0.4 | 0.5 | 43 | 20 |
| **TFDP1** | Up | 0.4 | 0.7 | 33 | 4 | Up | 0.1 | 0.9 | 37 | 21 |
| **TMEM164** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.2 | 0.8 | 25 | 13 |
| **MYCBP2** | Up | 0.1 | 0.9 | 53 | 8 | Up | 0.4 | 0.5 | 41 | 19 |
| **AKAP17A** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.2 | 0.7 | 44 | 23 |
| **GYG2P1** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.2 | 0.9 | 2 | 1 |
| **NAGA** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.2 | 0.7 | 46 | 24 |
| **NCK1** | Up | 0.2 | 0.8 | 57 | 8 | Up | 0.3 | 0.7 | 22 | 11 |
| **CHST5** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.4 | 0.7 | 11 | 5 |
| **KPNA2** | Up | 0.5 | 0.1 | 368 | 43 | Up | 0.0 | 1.0 | 41 | 25 |
| **ADNP** | Up | 0.1 | 0.9 | 35 | 5 | Up | 0.3 | 0.5 | 51 | 25 |
| **KIF3B** | Up | 0.3 | 0.7 | 62 | 8 | Up | 0.2 | 0.8 | 42 | 23 |
| **BTRC** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.4 | 0.7 | 23 | 11 |
| **CCNG1** | Up | 0.2 | 0.6 | 154 | 21 | Up | 0.2 | 0.7 | 59 | 31 |
| **MRPL48** | Up | 0.2 | 0.8 | 29 | 4 | Up | 0.3 | 0.7 | 39 | 20 |
| **RPN1** | Up | 0.0 | 1.0 | 75 | 12 | Up | 0.5 | 0.3 | 72 | 32 |
| **CERK** | Up | 0.4 | 0.7 | 34 | 4 | Up | 0.0 | 1.0 | 20 | 12 |
| **FAM134C** | Up | 0.1 | 0.9 | 47 | 7 | Up | 0.4 | 0.5 | 42 | 20 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **FKBP5** | Up | 0.1 | 0.9 | 47 | 7 | Up | 0.4 | 0.4 | 65 | 31 |
| **SRSF8** | Up | 0.4 | 0.6 | 49 | 6 | Up | 0.1 | 0.9 | 72 | 42 |
| **NF2** | Up | 0.3 | 0.7 | 55 | 7 | Up | 0.1 | 0.9 | 32 | 18 |
| **CLN8** | Up | 0.3 | 0.8 | 23 | 3 | Up | 0.2 | 0.8 | 24 | 13 |
| **TMEM55A** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.2 | 0.9 | 15 | 8 |
| **PRPSAP1** | Up | 0.0 | 1.0 | 38 | 6 | Up | 0.4 | 0.5 | 42 | 19 |
| **SPATS2** | Up | 0.3 | 0.7 | 48 | 6 | Up | 0.1 | 0.9 | 40 | 23 |
| **ZBTB3** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.0 | 1.0 | 5 | 3 |
| **NIPA2** | Up | 0.3 | 0.7 | 39 | 5 | Up | 0.1 | 0.8 | 57 | 32 |
| **SLTM** | Up | 0.2 | 0.8 | 30 | 4 | Up | 0.2 | 0.7 | 54 | 29 |
| **ZNHIT3** | Up | 0.3 | 0.7 | 38 | 5 | Up | 0.2 | 0.8 | 40 | 22 |
| **IL12RB1** | Up | 0.2 | 0.8 | 29 | 4 | Up | 0.2 | 0.8 | 23 | 12 |
| **KIAA1324** | Up | 0.1 | 0.9 | 67 | 10 | Up | 0.3 | 0.5 | 47 | 23 |
| **POLR3C** | Up | 0.4 | 0.8 | 9 | 1 | Up | 0.0 | 1.0 | 23 | 14 |
| **LOC100506284** | Up | 0.4 | 0.7 | 17 | 2 | Up | 0.0 | 1.0 | 5 | 3 |
| **TMEM30A** | Up | 0.4 | 0.5 | 122 | 15 | Up | 0.0 | 0.9 | 95 | 57 |
| **ITFG1** | Up | 0.3 | 0.7 | 31 | 4 | Up | 0.1 | 0.9 | 25 | 14 |
| **WDR33** | Up | 0.2 | 0.8 | 30 | 4 | Up | 0.2 | 0.8 | 44 | 24 |
| **SH3BP5** | Up | 0.4 | 0.6 | 65 | 8 | Up | 0.0 | 0.9 | 42 | 25 |
| **SLC39A9** | Up | 0.4 | 0.6 | 57 | 7 | Up | 0.0 | 1.0 | 50 | 30 |
| **NT5C2** | Up | 0.3 | 0.7 | 40 | 5 | Up | 0.1 | 0.9 | 24 | 14 |
| **LARP1** | Up | 0.3 | 0.6 | 114 | 15 | Up | 0.1 | 0.8 | 103 | 58 |
| **APOBEC3D** | Up | 0.3 | 0.8 | 23 | 3 | Up | 0.1 | 0.9 | 18 | 10 |
| **HINT3** | Up | 0.2 | 0.8 | 22 | 3 | Up | 0.2 | 0.8 | 17 | 9 |
| **YWHAE** | Up | 0.4 | 0.1 | 501 | 63 | Up | 0.1 | 0.8 | 223 | 132 |
| **CASP8** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.3 | 0.8 | 20 | 10 |
| **THSD4** | Up | 0.3 | 0.8 | 23 | 3 | Up | 0.1 | 0.9 | 25 | 14 |
| **HOMER3** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.2 | 0.9 | 20 | 11 |
| **COPZ1** | Up | 0.1 | 0.8 | 117 | 17 | Up | 0.3 | 0.5 | 101 | 52 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **BMP7** | Up | 0.0 | 1.0 | 26 | 4 | Up | 0.4 | 0.5 | 42 | 20 |
| **NCOR1** | Up | 0.3 | 0.6 | 98 | 13 | Up | 0.1 | 0.8 | 94 | 53 |
| **PACS2** | Up | 0.2 | 0.7 | 59 | 8 | Up | 0.2 | 0.8 | 74 | 41 |
| **MFN2** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.3 | 0.6 | 59 | 30 |
| **HSF2** | Up | 0.3 | 0.8 | 23 | 3 | Up | 0.1 | 0.9 | 30 | 17 |
| **SHOX** | Up | 0.2 | 0.7 | 52 | 7 | Up | 0.1 | 0.9 | 27 | 15 |
| **RNF115** | Up | 0.1 | 0.9 | 27 | 4 | Up | 0.3 | 0.8 | 20 | 10 |
| **RBM28** | Up | 0.1 | 0.9 | 27 | 4 | Up | 0.3 | 0.8 | 10 | 5 |
| **MRPS16** | Up | 0.3 | 0.5 | 142 | 18 | Up | 0.0 | 1.0 | 40 | 24 |
| **NUP93** | Up | 0.2 | 0.7 | 67 | 9 | Up | 0.1 | 0.9 | 39 | 22 |
| **PSMB7** | Up | 0.1 | 0.9 | 150 | 23 | Up | 0.3 | 0.5 | 76 | 38 |
| **BCR** | Up | 0.0 | 1.0 | 19 | 3 | Up | 0.4 | 0.5 | 55 | 26 |
| **DSTN** | Up | 0.2 | 0.6 | 191 | 26 | Up | 0.1 | 0.8 | 103 | 58 |
| **LOC728558** | Up | 0.3 | 0.7 | 38 | 5 | Up | 0.1 | 0.9 | 19 | 11 |
| **FAM116A** | Up | 0.1 | 0.9 | 53 | 8 | Up | 0.3 | 0.6 | 55 | 28 |
| **MITD1** | Up | 0.2 | 0.8 | 44 | 6 | Up | 0.1 | 0.9 | 25 | 14 |
| **ALG6** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.3 | 0.8 | 14 | 7 |
| **SNX24** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.3 | 0.7 | 32 | 16 |
| **UBE2O** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.3 | 0.7 | 24 | 12 |
| **C7orf44** | Up | 0.3 | 0.7 | 75 | 10 | Up | 0.1 | 0.9 | 50 | 29 |
| **DTWD2** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.3 | 0.8 | 10 | 5 |
| **TRMT12** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.1 | 0.9 | 7 | 4 |
| **OTUD3** | Up | 0.3 | 0.7 | 24 | 3 | Up | 0.0 | 1.0 | 18 | 11 |
| **KIAA0391** | Up | 0.3 | 0.8 | 23 | 3 | Up | 0.1 | 1.0 | 17 | 10 |
| **LOC100505659** | Up | 0.2 | 0.9 | 8 | 1 | Up | 0.1 | 1.0 | 12 | 7 |
| **C5orf22** | Up | 0.2 | 0.8 | 15 | 2 | Up | 0.1 | 0.9 | 14 | 8 |
| **S100A13** | Up | 0.1 | 0.9 | 66 | 10 | Up | 0.2 | 0.6 | 54 | 28 |
| **GUCA1B** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.3 | 0.9 | 4 | 2 |
| **MAGEA10** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.3 | 0.9 | 4 | 2 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **PARP9** | Up | 0.0 | 1.0 | 19 | 3 | Up | 0.3 | 0.6 | 35 | 17 |
| **MTRF1L** | Up | 0.0 | 1.0 | 25 | 4 | Up | 0.3 | 0.5 | 47 | 23 |
| **METTL2B** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.2 | 0.8 | 26 | 14 |
| **TRPV2** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.3 | 0.7 | 33 | 17 |
| **PDE12** | Up | 0.3 | 0.8 | 23 | 3 | Up | 0.0 | 1.0 | 20 | 12 |
| **MDM4** | Up | 0.2 | 0.7 | 99 | 14 | Up | 0.1 | 0.8 | 103 | 58 |
| **PGM2L1** | Up | 0.2 | 0.7 | 139 | 20 | Up | 0.1 | 0.8 | 36 | 20 |
| **SCFD2** | Up | 0.1 | 0.9 | 20 | 3 | Up | 0.2 | 0.8 | 23 | 12 |
| **PHACTR4** | Up | 0.3 | 0.6 | 115 | 15 | Up | 0.0 | 1.0 | 80 | 49 |
| **DOK2** | Up | 0.2 | 0.8 | 22 | 3 | Up | 0.1 | 0.9 | 7 | 4 |
| **USP13** | Up | 0.2 | 0.8 | 15 | 2 | Up | 0.1 | 1.0 | 17 | 10 |
| **MTMR6** | Up | 0.1 | 0.9 | 27 | 4 | Up | 0.2 | 0.8 | 26 | 14 |
| **MED17** | Up | 0.0 | 1.0 | 19 | 3 | Up | 0.3 | 0.7 | 24 | 12 |
| **ANKRD36B** | Up | 0.2 | 0.8 | 44 | 6 | Up | 0.1 | 1.0 | 22 | 13 |
| **OCRL** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.2 | 0.8 | 29 | 16 |
| **SLMO2** | Up | 0.1 | 0.9 | 73 | 11 | Up | 0.2 | 0.8 | 48 | 26 |
| **CCDC88A** | Up | 0.2 | 0.8 | 15 | 2 | Up | 0.0 | 0.9 | 37 | 22 |
| **BRE** | Up | 0.2 | 0.8 | 29 | 4 | Up | 0.1 | 0.9 | 39 | 23 |
| **RASAL2** | Up | 0.2 | 0.8 | 42 | 6 | Up | 0.1 | 0.9 | 21 | 12 |
| **IFRD1** | Up | 0.1 | 0.9 | 59 | 9 | Up | 0.2 | 0.8 | 39 | 21 |
| **GAB2** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.2 | 0.9 | 15 | 8 |
| **MOB1B** | Up | 0.0 | 1.0 | 32 | 5 | Up | 0.2 | 0.8 | 23 | 12 |
| **ARAF** | Up | 0.1 | 0.9 | 20 | 3 | Up | 0.2 | 0.7 | 59 | 32 |
| **HNRNPH3** | Up | 0.1 | 0.9 | 59 | 9 | Up | 0.2 | 0.7 | 57 | 31 |
| **JMJD1C** | Up | 0.2 | 0.8 | 44 | 6 | Up | 0.0 | 1.0 | 41 | 25 |
| **LYRM7** | Up | 0.2 | 0.8 | 64 | 9 | Up | 0.0 | 1.0 | 55 | 33 |
| **PIAS4** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.2 | 0.9 | 20 | 11 |
| **HUNK** | Up | 0.1 | 0.9 | 21 | 3 | Up | 0.1 | 0.9 | 34 | 20 |
| **NSMCE2** | Up | 0.1 | 0.9 | 20 | 3 | Up | 0.1 | 0.9 | 9 | 5 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **DDX5** | Up | 0.1 | 0.6 | 457 | 67 | Up | 0.1 | 0.9 | 254 | 151 |
| **NRIP2** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.1 | 0.9 | 9 | 5 |
| **PREP** | Up | 0.0 | 1.0 | 25 | 4 | Up | 0.2 | 0.8 | 17 | 9 |
| **TMED2** | Up | 0.2 | 0.7 | 127 | 18 | Up | 0.0 | 1.0 | 70 | 43 |
| **NUPL1** | Up | 0.0 | 1.0 | 38 | 6 | Up | 0.2 | 0.8 | 22 | 12 |
| **PRICKLE1** | Up | 0.1 | 0.9 | 14 | 2 | Up | 0.1 | 1.0 | 17 | 10 |
| **SF3A3** | Up | 0.1 | 0.9 | 100 | 15 | Up | 0.1 | 0.9 | 62 | 36 |
| **PSMA7** | Up | 0.1 | 0.9 | 240 | 37 | Up | 0.1 | 0.8 | 65 | 37 |
| **NFATC1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.1 | 0.9 | 21 | 12 |
| **LOC100506162** | Up | 0.1 | 0.9 | 20 | 3 | Up | 0.1 | 0.9 | 33 | 19 |
| **RPL23AP53** | Up | 0.1 | 0.9 | 21 | 3 | Up | 0.0 | 1.0 | 23 | 14 |
| **RPL26** | Up | 0.1 | 0.7 | 407 | 60 | Up | 0.0 | 1.0 | 121 | 74 |
| **FBXO45** | Up | 0.1 | 0.9 | 34 | 5 | Up | 0.0 | 1.0 | 30 | 18 |
| **TRAF3IP2** | Up | 0.1 | 0.9 | 60 | 9 | Up | 0.1 | 0.9 | 54 | 32 |
| **TAPBP** | Up | 0.0 | 1.0 | 138 | 22 | Up | 0.1 | 0.7 | 107 | 60 |
| **ZNF440** | Up | 0.0 | 1.0 | 13 | 2 | Up | 0.1 | 0.9 | 9 | 5 |
| **SUGT1** | Up | 0.1 | 0.9 | 47 | 7 | Up | 0.0 | 1.0 | 25 | 15 |
| **BMI1** | Up | 0.0 | 1.0 | 13 | 2 | Up | 0.1 | 0.9 | 32 | 18 |
| **ACTR1A** | Up | 0.1 | 0.9 | 86 | 13 | Up | 0.0 | 1.0 | 91 | 55 |
| **ARF4** | Up | 0.0 | 0.9 | 443 | 69 | Up | 0.1 | 0.8 | 173 | 102 |
| **SKA1** | Up | 0.0 | 0.9 | 52 | 8 | Up | 0.1 | 0.9 | 34 | 20 |
| **XRCC2** | Up | 0.0 | 1.0 | 25 | 4 | Up | 0.1 | 0.9 | 16 | 9 |
| **SRXN1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.0 | 1.0 | 35 | 21 |
| **AVEN** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.0 | 1.0 | 5 | 3 |
| **DMBX1** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.0 | 1.0 | 5 | 3 |
| **ZNF468** | Up | 0.1 | 0.9 | 7 | 1 | Up | 0.0 | 1.0 | 10 | 6 |
| **GSTO1** | Up | 0.0 | 0.9 | 84 | 13 | Up | 0.0 | 1.0 | 61 | 37 |
| **PCM1** | Up | 0.0 | 1.0 | 51 | 8 | Up | 0.0 | 1.0 | 56 | 34 |

**Appendix Table A.3.4.1.** this table shows the cDNA library endothelial and angiogenic differential gene expression results. 3,069 genes were found to have a positive fold change in both endothelial and angiogenic screens. The endothelial screen was a Roche 454 liver endothelial library plus public endothelial cDNA libraries versus public non-endothelial libraries. The angiogenic screen was bulk tissue foetal/tumour versus normal bulk tissue libraries. Genes that were found over expressed in both screens (positive log2(FC)) are listed here.

## Appendix Table A.3.4.2. Table of vascular targets, those secreted or transmembrane

| Gene | Product |
|---|---|
| **FCGR1A** | Fc fragment of IgG, high affinity Ia, receptor (CD64) |
| **FGF18** | fibroblast growth factor 18 |
| **REG3A** | regenerating islet-derived 3 alpha |
| **PTX3** | pentraxin 3, long |
| **ELFN2** | extracellular leucine-rich repeat and fibronectin type III domain containing 2 |
| **CHST8** | carbohydrate (N-acetylgalactosamine 4-0) sulfotransferase 8 |
| **CSMD3** | CUB and Sushi multiple domains 3 |
| **PCDH12** | protocadherin 12 |
| **KCNMB3** | potassium large conductance calcium-activated channel, subfamily M beta member 3 |
| **NMU** | neuromedin U |
| **MOGAT3** | monoacylglycerol O-acyltransferase 3 |
| **MUC21** | mucin 21, cell surface associated |
| **MARCH4** | membrane-associated ring finger (C3HC4) 4 |
| **KLRC2** | killer cell lectin-like receptor subfamily C, member 2 |
| **MYCT1** | myc target 1 |
| **SEMA3G** | sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3G |
| **CCRL2** | chemokine (C-C motif) receptor-like 2 |
| **C2orf83** | chromosome 2 open reading frame 83 |
| **CHRND** | cholinergic receptor, nicotinic, delta |
| **KCNH7** | potassium voltage-gated channel, subfamily H (eag-related), member 7 |
| **FAM163A** | family with sequence similarity 163, member A |
| **PCDH15** | protocadherin-related 15 |
| **LY6G5B** | lymphocyte antigen 6 complex, locus G5B |
| **CD163L1** | CD163 molecule-like 1 |
| **NPFFR2** | neuropeptide FF receptor 2 |
| **PLA2G10** | phospholipase A2, group X |
| **CDSN** | corneodesmosin |
| **SLC35G1** | solute carrier family 35, member G1 |
| **NR2E3** | nuclear receptor subfamily 2, group E, member 3 |
| **LY96** | lymphocyte antigen 96 |
| **DCD** | dermcidin |
| **GJD4** | gap junction protein, delta 4, 40.1kDa |
| **IL31RA** | interleukin 31 receptor A |
| **CLEC4C** | C-type lectin domain family 4, member C |
| **TMPRSS11BNL** | TMPRSS11B N terminal-like |
| **FER1L5** | fer-1-like 5 (C. elegans) |
| **RAET1G** | retinoic acid early transcript 1G |
| **PAX1** | paired box 1 |
| **MMP15** | matrix metallopeptidase 15 (membrane-inserted) |
| **TTC13** | tetratricopeptide repeat domain 13 |
| **WNT4** | wingless-type MMTV integration site family, member 4 |

| | |
|---|---|
| **NALCN** | sodium leak channel, non-selective |
| **XKR6** | XK, Kell blood group complex subunit-related family, member 6 |
| **SPINK7** | serine peptidase inhibitor, Kazal type 7 (putative) |
| **C11orf45** | chromosome 11 open reading frame 45 |
| **SLC2A14** | solute carrier family 2 (facilitated glucose transporter), member 14 |
| **TMPRSS11D** | transmembrane protease, serine 11D |
| **C19orf18** | chromosome 19 open reading frame 18 |
| **CEACAM21** | carcinoembryonic antigen-related cell adhesion molecule 21 |
| **FAM180A** | family with sequence similarity 180, member A |
| **CCL3L1** | chemokine (C-C motif) ligand 3-like 1 |
| **APCDD1L** | adenomatosis polyposis coli down-regulated 1-like |
| **SLCO3A1** | solute carrier organic anion transporter family, member 3A1 |
| **CCL20** | chemokine (C-C motif) ligand 20 |
| **MARCH3** | membrane-associated ring finger (C3HC4) 3 |
| **RGR** | retinal G protein coupled receptor |
| **EPHB1** | EPH receptor B1 |
| **SCN3A** | sodium channel, voltage-gated, type III, alpha subunit |
| **CBX2** | chromobox homolog 2 |
| **CD2** | CD2 molecule |
| **HTN3** | histatin 3 |
| **STEAP1B** | STEAP family member 1B |
| **PRR23A** | proline rich 23A |
| **CCRN4L** | CCR4 carbon catabolite repression 4-like (S. cerevisiae) |
| **SEMA3D** | sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3D |
| **RLN2** | relaxin 2 |
| **GRIN3A** | glutamate receptor, ionotropic, N-methyl-D-aspartate 3A |
| **NKPD1** | NTPase, KAP family P-loop domain containing 1 |
| **PCDHGA7** | protocadherin gamma subfamily A, 7 |
| **MILR1** | mast cell immunoglobulin-like receptor 1 |
| **PKD1L3** | polycystic kidney disease 1-like 3 |
| **CYSLTR1** | cysteinyl leukotriene receptor 1 |
| **KCNK17** | potassium channel, subfamily K, member 17 |
| **LPPR4** | lipid phosphate phosphatase-related protein type 4 |
| **FAM18B2-CDRT4** | FAM18B2-CDRT4 readthrough |
| **FCRL6** | Fc receptor-like 6 |
| **VWC2** | von Willebrand factor C domain containing 2 |
| **NANOGNB** | NANOG neighbor homeobox |
| **LYG2** | lysozyme G-like 2 |
| **XKR5** | XK, Kell blood group complex subunit-related family, member 5 |
| **COL9A1** | collagen, type IX, alpha 1 |
| **RNF182** | ring finger protein 182 |
| **TPSG1** | tryptase gamma 1 |
| **TIMP4** | TIMP metallopeptidase inhibitor 4 |
| **CDH23** | cadherin-related 23 |

| | |
|---|---|
| **PRKD1** | protein kinase D1 |
| **POSTN** | periostin, osteoblast specific factor |
| **CCDC112** | coiled-coil domain containing 112 |
| **ATG9B** | ATG9 autophagy related 9 homolog B (S. cerevisiae) |
| **NDST3** | N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 3 |
| **FAM24B** | family with sequence similarity 24, member B |
| **EMILIN3** | elastin microfibril interfacer 3 |
| **ANGPT2** | angiopoietin 2 |
| **PDGFB** | platelet-derived growth factor beta polypeptide |
| **CKLF** | chemokine-like factor |
| **BMP4** | bone morphogenetic protein 4 |
| **TMTC4** | transmembrane and tetratricopeptide repeat containing 4 |
| **ADAM19** | ADAM metallopeptidase domain 19 |
| **DISP2** | dispatched homolog 2 (Drosophila) |
| **FAM69B** | family with sequence similarity 69, member B |
| **GLT25D1** | glycosyltransferase 25 domain containing 1 |
| **SLC46A3** | solute carrier family 46, member 3 |
| **FPR3** | formyl peptide receptor 3 |
| **PLXNA4** | plexin A4 |
| **ATP2C2** | ATPase, Ca++ transporting, type 2C, member 2 |
| **PRTG** | protogenin |
| **GDPD2** | glycerophosphodiester phosphodiesterase domain containing 2 |
| **PCDHB7** | protocadherin beta 7 |
| **JAG1** | jagged 1 |
| **DISP1** | dispatched homolog 1 (Drosophila) |
| **FUT4** | fucosyltransferase 4 (alpha (1,3) fucosyltransferase, myeloid-specific) |
| **ATP11A** | ATPase, class VI, type 11A |
| **TNFRSF25** | tumor necrosis factor receptor superfamily, member 25 |
| **TMEM100** | transmembrane protein 100 |
| **CHST1** | carbohydrate (keratan sulfate Gal-6) sulfotransferase 1 |
| **MFSD11** | major facilitator superfamily domain containing 11 |
| **MGST2** | microsomal glutathione S-transferase 2 |
| **PDPN** | podoplanin |
| **PDZD8** | PDZ domain containing 8 |
| **IGFLR1** | IGF-like family receptor 1 |
| **DLL1** | delta-like 1 (Drosophila) |
| **CSF2RA** | colony stimulating factor 2 receptor, alpha, low-affinity (granulocyte-macrophage) |
| **LRRC37A** | leucine rich repeat containing 37A |
| **RHBDF2** | rhomboid 5 homolog 2 (Drosophila) |
| **LECT1** | leukocyte cell derived chemotaxin 1 |
| **TNFSF4** | tumor necrosis factor (ligand) superfamily, member 4 |
| **SLC6A4** | solute carrier family 6 (neurotransmitter transporter, serotonin), member 4 |
| **SLC44A5** | solute carrier family 44, member 5 |
| **HRH4** | histamine receptor H4 |
| **EFNA2** | ephrin-A2 |
| **MS4A2** | membrane-spanning 4-domains, subfamily A, member 2 (Fc fragment of IgE, high |

| | |
|---|---|
| | affinity I, receptor for; beta polypeptide) |
| **IL12RB2** | interleukin 12 receptor, beta 2 |
| **CSPG5** | chondroitin sulfate proteoglycan 5 (neuroglycan C) |
| **SULF2** | sulfatase 2 |
| **STX8** | syntaxin 8 |
| **EPHB2** | EPH receptor B2 |
| **ADCY8** | adenylate cyclase 8 (brain) |
| **BDKRB2** | bradykinin receptor B2 |
| **RBM24** | RNA binding motif protein 24 |
| **IGSF1** | immunoglobulin superfamily, member 1 |
| **NRN1** | neuritin 1 |
| **SLC36A4** | solute carrier family 36 (proton/amino acid symporter), member 4 |
| **PTPRE** | protein tyrosine phosphatase, receptor type, E |
| **GALNT10** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 10 (GalNAc-T10) |
| **STAB1** | stabilin 1 |
| **C17orf61** | chromosome 17 open reading frame 61 |
| **ECSCR** | endothelial cell-specific chemotaxis regulator |
| **FAT4** | FAT tumor suppressor homolog 4 (Drosophila) |
| **SVOP** | SV2 related protein homolog (rat) |
| **FAM26E** | family with sequence similarity 26, member E |
| **CFI** | complement factor I |
| **TMEM194A** | transmembrane protein 194A |
| **HERPUD2** | HERPUD family member 2 |
| **ADCY3** | adenylate cyclase 3 |
| **CYB561** | cytochrome b-561 |
| **BGN** | biglycan |
| **ISLR2** | immunoglobulin superfamily containing leucine-rich repeat 2 |
| **TMEM194B** | transmembrane protein 194B |
| **SLAMF6** | SLAM family member 6 |
| **PCDHA9** | protocadherin alpha 9 |
| **LUZP2** | leucine zipper protein 2 |
| **ULBP2** | UL16 binding protein 2 |
| **SHISA2** | shisa homolog 2 (Xenopus laevis) |
| **OLFML1** | olfactomedin-like 1 |
| **C1QTNF6** | C1q and tumor necrosis factor related protein 6 |
| **MRPL24** | mitochondrial ribosomal protein L24 |
| **VRK2** | vaccinia related kinase 2 |
| **CNIH4** | cornichon homolog 4 (Drosophila) |
| **FAM174B** | family with sequence similarity 174, member B |
| **EVC** | Ellis van Creveld syndrome |
| **CETP** | cholesteryl ester transfer protein, plasma |
| **CCDC167** | coiled-coil domain containing 167 |
| **CD101** | CD101 molecule |
| **FOXRED2** | FAD-dependent oxidoreductase domain containing 2 |
| **SLC24A5** | solute carrier family 24, member 5 |

| | |
|---|---|
| **GJD3** | gap junction protein, delta 3, 31.9kDa |
| **FAM18A** | family with sequence similarity 18, member A |
| **SRL** | sarcalumenin |
| **DDR2** | discoidin domain receptor tyrosine kinase 2 |
| **RCN1** | reticulocalbin 1, EF-hand calcium binding domain |
| **MMP1** | matrix metallopeptidase 1 (interstitial collagenase) |
| **TCN2** | transcobalamin II |
| **MAN2A1** | mannosidase, alpha, class 2A, member 1 |
| **LRFN4** | leucine rich repeat and fibronectin type III domain containing 4 |
| **SLC29A1** | solute carrier family 29 (nucleoside transporters), member 1 |
| **TMEM119** | transmembrane protein 119 |
| **PCDH8** | protocadherin 8 |
| **SLC25A26** | solute carrier family 25, member 26 |
| **ANGPTL2** | angiopoietin-like 2 |
| **JAG2** | jagged 2 |
| **GALNTL2** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 2 |
| **PLXND1** | plexin D1 |
| **COX16** | COX16 cytochrome c oxidase assembly homolog (S. cerevisiae) |
| **EDEM1** | ER degradation enhancer, mannosidase alpha-like 1 |
| **TXNDC5** | thioredoxin domain containing 5 (endoplasmic reticulum) |
| **TYRO3** | TYRO3 protein tyrosine kinase |
| **SLC38A3** | solute carrier family 38, member 3 |
| **MRPS24** | mitochondrial ribosomal protein S24 |
| **GRAMD4** | GRAM domain containing 4 |
| **CD96** | CD96 molecule |
| **ODZ3** | odz, odd Oz/ten-m homolog 3 (Drosophila) |
| **GPR63** | G protein-coupled receptor 63 |
| **IL7** | interleukin 7 |
| **C14orf135** | chromosome 14 open reading frame 135 |
| **TSPAN3** | tetraspanin 3 |
| **ABCB6** | ATP-binding cassette, sub-family B (MDR/TAP), member 6 |
| **GPR12** | G protein-coupled receptor 12 |
| **MCU** | mitochondrial calcium uniporter |
| **TMEM59L** | transmembrane protein 59-like |
| **APOL2** | apolipoprotein L, 2 |
| **VOPP1** | vesicular, overexpressed in cancer, prosurvival protein 1 |
| **SERINC5** | serine incorporator 5 |
| **SDK2** | sidekick homolog 2 (chicken) |
| **CHRNA5** | cholinergic receptor, nicotinic, alpha 5 |
| **FAM5B** | family with sequence similarity 5, member B |
| **TMIGD2** | transmembrane and immunoglobulin domain containing 2 |
| **USH2A** | Usher syndrome 2A (autosomal recessive, mild) |
| **CSMD1** | CUB and Sushi multiple domains 1 |
| **SGK196** | protein kinase-like protein SgK196 |
| **PTCHD1** | patched domain containing 1 |

| | |
|---|---|
| **ADRA1B** | adrenergic, alpha-1B-, receptor |
| **BSND** | Bartter syndrome, infantile, with sensorineural deafness (Barttin) |
| **LOC100507050** | hypothetical LOC100507050 |
| **C17orf72** | chromosome 17 open reading frame 72 |
| **C5orf28** | chromosome 5 open reading frame 28 |
| **TAOK2** | TAO kinase 2 |
| **ETNK1** | ethanolamine kinase 1 |
| **PLXNA2** | plexin A2 |
| **ST8SIA4** | ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4 |
| **SLC35E2** | solute carrier family 35, member E2 |
| **CACNG8** | calcium channel, voltage-dependent, gamma subunit 8 |
| **SPARC** | secreted protein, acidic, cysteine-rich (osteonectin) |
| **CDH5** | cadherin 5, type 2 (vascular endothelium) |
| **MMP10** | matrix metallopeptidase 10 (stromelysin 2) |
| **DHODH** | dihydroorotate dehydrogenase |
| **PIGX** | phosphatidylinositol glycan anchor biosynthesis, class X |
| **ART3** | ADP-ribosyltransferase 3 |
| **ENG** | endoglin |
| **CLCC1** | chloride channel CLIC-like 1 |
| **ITIH5** | inter-alpha (globulin) inhibitor H5 |
| **SLC44A3** | solute carrier family 44, member 3 |
| **CDKAL1** | CDK5 regulatory subunit associated protein 1-like 1 |
| **SCN2B** | sodium channel, voltage-gated, type II, beta |
| **HRH1** | histamine receptor H1 |
| **ZDHHC13** | zinc finger, DHHC-type containing 13 |
| **TTC9B** | tetratricopeptide repeat domain 9B |
| **LGMN** | legumain |
| **C1QTNF5** | C1q and tumor necrosis factor related protein 5 |
| **SLC36A1** | solute carrier family 36 (proton/amino acid symporter), member 1 |
| **MARCH6** | membrane-associated ring finger (C3HC4) 6 |
| **TMEM104** | transmembrane protein 104 |
| **NDUFA4L2** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4-like 2 |
| **PRRT3** | proline-rich transmembrane protein 3 |
| **TRAM2** | translocation associated membrane protein 2 |
| **HBEGF** | heparin-binding EGF-like growth factor |
| **GORAB** | golgin, RAB6-interacting |
| **TNFRSF21** | tumor necrosis factor receptor superfamily, member 21 |
| **SLC12A2** | solute carrier family 12 (sodium/potassium/chloride transporters), member 2 |
| **B3GALT2** | UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2 |
| **TNFSF8** | tumor necrosis factor (ligand) superfamily, member 8 |
| **GLB1** | galactosidase, beta 1 |
| **VAMP8** | vesicle-associated membrane protein 8 (endobrevin) |
| **GPD2** | glycerol-3-phosphate dehydrogenase 2 (mitochondrial) |
| **BTNL9** | butyrophilin-like 9 |
| **ROM1** | retinal outer segment membrane protein 1 |
| **RNF185** | ring finger protein 185 |

| | |
|---|---|
| **SLC35E2B** | solute carrier family 35, member E2B |
| **IL20RB** | interleukin 20 receptor beta |
| **TMEM179B** | transmembrane protein 179B |
| **FAM57A** | family with sequence similarity 57, member A |
| **CYYR1** | cysteine/tyrosine-rich 1 |
| **SLC7A7** | solute carrier family 7 (amino acid transporter light chain, y+L system), member 7 |
| **NRCAM** | neuronal cell adhesion molecule |
| **CTSZ** | cathepsin Z |
| **JAM3** | junctional adhesion molecule 3 |
| **PISD** | phosphatidylserine decarboxylase |
| **GPR155** | G protein-coupled receptor 155 |
| **UQCRQ** | ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kDa |
| **DTNA** | dystrobrevin, alpha |
| **GLT8D1** | glycosyltransferase 8 domain containing 1 |
| **PTAFR** | platelet-activating factor receptor |
| **PXDN** | peroxidasin homolog (Drosophila) |
| **SERF1B** | small EDRK-rich factor 1B (centromeric) |
| **BNIP1** | BCL2/adenovirus E1B 19kDa interacting protein 1 |
| **SLC27A1** | solute carrier family 27 (fatty acid transporter), member 1 |
| **GRIA3** | glutamate receptor, ionotrophic, AMPA 3 |
| **PDIA5** | protein disulfide isomerase family A, member 5 |
| **FAM18B2** | family with sequence similarity 18, member B2 |
| **KRTCAP2** | keratinocyte associated protein 2 |
| **DCHS1** | dachsous 1 (Drosophila) |
| **ENPP5** | ectonucleotide pyrophosphatase/phosphodiesterase 5 (putative) |
| **PLAC9** | placenta-specific 9 |
| **GPR37L1** | G protein-coupled receptor 37 like 1 |
| **CLDN11** | claudin 11 |
| **RHBDL2** | rhomboid, veinlet-like 2 (Drosophila) |
| **LCORL** | ligand dependent nuclear receptor corepressor-like |
| **CCDC85A** | coiled-coil domain containing 85A |
| **PTPLA** | protein tyrosine phosphatase-like (proline instead of catalytic arginine), member A |
| **ARSK** | arylsulfatase family, member K |
| **KDELC1** | KDEL (Lys-Asp-Glu-Leu) containing 1 |
| **SLC26A7** | solute carrier family 26, member 7 |
| **C17orf65** | chromosome 17 open reading frame 65 |
| **HTR2A** | 5-hydroxytryptamine (serotonin) receptor 2A |
| **SLC25A43** | solute carrier family 25, member 43 |
| **ITGA10** | integrin, alpha 10 |
| **CYTL1** | cytokine-like 1 |
| **CSF2RB** | colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) |
| **GPC5** | glypican 5 |
| **GPR143** | G protein-coupled receptor 143 |
| **LRRC38** | leucine rich repeat containing 38 |
| **GREM2** | gremlin 2 |
| **RPN2** | ribophorin II |

| | |
|---|---|
| **ORMDL3** | ORM1-like 3 (S. cerevisiae) |
| **SERINC4** | serine incorporator 4 |
| **GNRH1** | gonadotropin-releasing hormone 1 (luteinizing-releasing hormone) |
| **BOC** | Boc homolog (mouse) |
| **MARVELD2** | MARVEL domain containing 2 |
| **SGCB** | sarcoglycan, beta (43kDa dystrophin-associated glycoprotein) |
| **DEFB1** | defensin, beta 1 |
| **DPM3** | dolichyl-phosphate mannosyltransferase polypeptide 3 |
| **TMEM80** | transmembrane protein 80 |
| **PDCD1LG2** | programmed cell death 1 ligand 2 |
| **MMP16** | matrix metallopeptidase 16 (membrane-inserted) |
| **KCNK2** | potassium channel, subfamily K, member 2 |
| **MRPL27** | mitochondrial ribosomal protein L27 |
| **CLDN14** | claudin 14 |
| **RPRML** | reprimo-like |
| **LY6G5C** | lymphocyte antigen 6 complex, locus G5C |
| **IL12B** | interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) |
| **ANGPT4** | angiopoietin 4 |
| **PLOD1** | procollagen-lysine 1, 2-oxoglutarate 5-dioxygenase 1 |
| **CCDC56** | coiled-coil domain containing 56 |
| **APLN** | apelin |
| **SLC35D1** | solute carrier family 35 (UDP-glucuronic acid/UDP-N-acetylgalactosamine dual transporter), member D1 |
| **CD8A** | CD8a molecule |
| **CNNM3** | cyclin M3 |
| **ATP5G1** | ATP synthase, H+ transporting, mitochondrial Fo complex, subunit C1 (subunit 9) |
| **LPCAT4** | lysophosphatidylcholine acyltransferase 4 |
| **ADAMTS2** | ADAM metallopeptidase with thrombospondin type 1 motif, 2 |
| **SGCE** | sarcoglycan, epsilon |
| **MGST3** | microsomal glutathione S-transferase 3 |
| **ST3GAL5** | ST3 beta-galactoside alpha-2,3-sialyltransferase 5 |
| **CBLN4** | cerebellin 4 precursor |
| **SLC4A8** | solute carrier family 4, sodium bicarbonate cotransporter, member 8 |
| **FZD8** | frizzled family receptor 8 |
| **HIATL1** | hippocampus abundant transcript-like 1 |
| **EFNA5** | ephrin-A5 |
| **TMEM43** | transmembrane protein 43 |
| **ANO6** | anoctamin 6 |
| **MRPL21** | mitochondrial ribosomal protein L21 |
| **UNC5B** | unc-5 homolog B (C. elegans) |
| **GNAS** | GNAS complex locus |
| **TM2D1** | TM2 domain containing 1 |
| **LAMA4** | laminin, alpha 4 |
| **IFI27** | interferon, alpha-inducible protein 27 |
| **LMAN2L** | lectin, mannose-binding 2-like |

| | |
|---|---|
| **SLC7A6** | solute carrier family 7 (amino acid transporter light chain, y+L system), member 6 |
| **TMEM143** | transmembrane protein 143 |
| **NTN5** | netrin 5 |
| **ATP11C** | ATPase, class VI, type 11C |
| **RHBDF1** | rhomboid 5 homolog 1 (Drosophila) |
| **SLC43A3** | solute carrier family 43, member 3 |
| **ABCC5** | ATP-binding cassette, sub-family C (CFTR/MRP), member 5 |
| **TMEM62** | transmembrane protein 62 |
| **TMCC1** | transmembrane and coiled-coil domain family 1 |
| **JHDM1D** | jumonji C domain containing histone demethylase 1 homolog D (S. cerevisiae) |
| **B3GALNT2** | beta-1,3-N-acetylgalactosaminyltransferase 2 |
| **TMCO3** | transmembrane and coiled-coil domains 3 |
| **C1orf54** | chromosome 1 open reading frame 54 |
| **TMEM60** | transmembrane protein 60 |
| **AGA** | aspartylglucosaminidase |
| **MARCH1** | membrane-associated ring finger (C3HC4) 1 |
| **SLC7A14** | solute carrier family 7 (orphan transporter), member 14 |
| **ATP5J2** | ATP synthase, H+ transporting, mitochondrial Fo complex, subunit F2 |
| **MCHR1** | melanin-concentrating hormone receptor 1 |
| **STX2** | syntaxin 2 |
| **SIGLEC8** | sialic acid binding Ig-like lectin 8 |
| **TMEM53** | transmembrane protein 53 |
| **LEMD2** | LEM domain containing 2 |
| **TMEM98** | transmembrane protein 98 |
| **HPSE** | heparanase |
| **MARVELD3** | MARVEL domain containing 3 |
| **CACNG2** | calcium channel, voltage-dependent, gamma subunit 2 |
| **CTLA4** | cytotoxic T-lymphocyte-associated protein 4 |
| **PAQR8** | progestin and adipoQ receptor family member VIII |
| **TMEM35** | transmembrane protein 35 |
| **JKAMP** | JNK1/MAPK8-associated membrane protein |
| **SIAE** | sialic acid acetylesterase |
| **NFE2L3** | nuclear factor (erythroid-derived 2)-like 3 |
| **C3orf18** | chromosome 3 open reading frame 18 |
| **UPK3BL** | uroplakin 3B-like |
| **TNFRSF1A** | tumor necrosis factor receptor superfamily, member 1A |
| **IGFBP7** | insulin-like growth factor binding protein 7 |
| **ATP1B3** | ATPase, Na+/K+ transporting, beta 3 polypeptide |
| **SCN3B** | sodium channel, voltage-gated, type III, beta |
| **NDUFB6** | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 6, 17kDa |
| **TSPAN5** | tetraspanin 5 |
| **GLCE** | glucuronic acid epimerase |
| **ACP2** | acid phosphatase 2, lysosomal |
| **NDUFB4** | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4, 15kDa |
| **SAMD8** | sterile alpha motif domain containing 8 |
| **LEPR** | leptin receptor |

| | |
|---|---|
| **GZMH** | granzyme H (cathepsin G-like 2, protein h-CCPX) |
| **EXTL2** | exostoses (multiple)-like 2 |
| **C18orf26** | chromosome 18 open reading frame 26 |
| **B3GNT1** | UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1 |
| **SEMA4F** | sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4F |
| **SSR3** | signal sequence receptor, gamma (translocon-associated protein gamma) |
| **GPR173** | G protein-coupled receptor 173 |
| **TLCD1** | TLC domain containing 1 |
| **CXCR4** | chemokine (C-X-C motif) receptor 4 |
| **DERL2** | Der1-like domain family, member 2 |
| **PDSS1** | prenyl (decaprenyl) diphosphate synthase, subunit 1 |
| **BMP6** | bone morphogenetic protein 6 |
| **DAND5** | DAN domain family, member 5 |
| **FANCM** | Fanconi anemia, complementation group M |
| **CHODL** | chondrolectin |
| **ASB11** | ankyrin repeat and SOCS box containing 11 |
| **FUT11** | fucosyltransferase 11 (alpha (1,3) fucosyltransferase) |
| **C6orf57** | chromosome 6 open reading frame 57 |
| **SPAG4** | sperm associated antigen 4 |
| **NPTX2** | neuronal pentraxin II |
| **ADCY9** | adenylate cyclase 9 |
| **ST3GAL3** | ST3 beta-galactoside alpha-2,3-sialyltransferase 3 |
| **NPTXR** | neuronal pentraxin receptor |
| **FNDC3B** | fibronectin type III domain containing 3B |
| **SLC20A1** | solute carrier family 20 (phosphate transporter), member 1 |
| **CALU** | calumenin |
| **GNS** | glucosamine (N-acetyl)-6-sulfatase |
| **BACE1** | beta-site APP-cleaving enzyme 1 |
| **FAM105A** | family with sequence similarity 105, member A |
| **GYPE** | glycophorin E (MNS blood group) |
| **CMKLR1** | chemokine-like receptor 1 |
| **CECR5** | cat eye syndrome chromosome region, candidate 5 |
| **LOC147670** | hypothetical protein LOC147670 |
| **ENPP6** | ectonucleotide pyrophosphatase/phosphodiesterase 6 |
| **DEXI** | Dexi homolog (mouse) |
| **CNTNAP1** | contactin associated protein 1 |
| **VSIG1** | V-set and immunoglobulin domain containing 1 |
| **MDFIC** | MyoD family inhibitor domain containing |
| **PSAP** | prosaposin |
| **H6PD** | hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) |
| **NDUFA1** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1, 7.5kDa |
| **ITGA6** | integrin, alpha 6 |
| **HEXB** | hexosaminidase B (beta polypeptide) |
| **CCL22** | chemokine (C-C motif) ligand 22 |
| **SEC22B** | SEC22 vesicle trafficking protein homolog B (S. cerevisiae) (gene/pseudogene) |

| | |
|---|---|
| **ADAM17** | ADAM metallopeptidase domain 17 |
| **CLDN15** | claudin 15 |
| **SEC61A2** | Sec61 alpha 2 subunit (S. cerevisiae) |
| **MANEAL** | mannosidase, endo-alpha-like |
| **C6orf70** | chromosome 6 open reading frame 70 |
| **PIGB** | phosphatidylinositol glycan anchor biosynthesis, class B |
| **ACBD5** | acyl-CoA binding domain containing 5 |
| **GFRA3** | GDNF family receptor alpha 3 |
| **C15orf24** | chromosome 15 open reading frame 24 |
| **ATP6V0A2** | ATPase, H+ transporting, lysosomal V0 subunit a2 |
| **FZD4** | frizzled family receptor 4 |
| **MERTK** | c-mer proto-oncogene tyrosine kinase |
| **COX18** | COX18 cytochrome c oxidase assembly homolog (S. cerevisiae) |
| **IAPP** | islet amyloid polypeptide |
| **GOLGB1** | golgin B1 |
| **SLC35D2** | solute carrier family 35, member D2 |
| **SEC61G** | Sec61 gamma subunit |
| **GLG1** | golgi glycoprotein 1 |
| **P4HA1** | prolyl 4-hydroxylase, alpha polypeptide I |
| **MLLT10** | myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 10 |
| **ESYT1** | extended synaptotagmin-like protein 1 |
| **RPN1** | ribophorin I |
| **SHE** | Src homology 2 domain containing E |
| **IL13RA1** | interleukin 13 receptor, alpha 1 |
| **DNAJC10** | DnaJ (Hsp40) homolog, subfamily C, member 10 |
| **LNX1** | ligand of numb-protein X 1 |
| **GALNT1** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 1 (GalNAc-T1) |
| **CCDC149** | coiled-coil domain containing 149 |
| **S1PR2** | sphingosine-1-phosphate receptor 2 |
| **SERINC1** | serine incorporator 1 |
| **PIGT** | phosphatidylinositol glycan anchor biosynthesis, class T |
| **HTATIP2** | HIV-1 Tat interactive protein 2, 30kDa |
| **SELK** | selenoprotein K |
| **FKBP7** | FK506 binding protein 7 |
| **C3orf45** | chromosome 3 open reading frame 45 |
| **TMEM169** | transmembrane protein 169 |
| **PIGN** | phosphatidylinositol glycan anchor biosynthesis, class N |
| **CHST5** | carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 5 |
| **ARSB** | arylsulfatase B |
| **SUSD1** | sushi domain containing 1 |
| **PQLC2** | PQ loop repeat containing 2 |
| **FDX1L** | ferredoxin 1-like |
| **SEL1L3** | sel-1 suppressor of lin-12-like 3 (C. elegans) |
| **FUT9** | fucosyltransferase 9 (alpha (1,3) fucosyltransferase) |

| | |
|---|---|
| **FAM19A1** | family with sequence similarity 19 (chemokine (C-C motif)-like), member A1 |
| **GALNT4** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 4 (GalNAc-T4) |
| **TMEM127** | transmembrane protein 127 |
| **DLL4** | delta-like 4 (Drosophila) |
| **ICAM2** | intercellular adhesion molecule 2 |
| **YIPF5** | Yip1 domain family, member 5 |
| **C1orf115** | chromosome 1 open reading frame 115 |
| **LYSMD3** | LysM, putative peptidoglycan-binding, domain containing 3 |
| **LRRC8C** | leucine rich repeat containing 8 family, member C |
| **SLC41A2** | solute carrier family 41, member 2 |
| **FUT1** | fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase, H blood group) |
| **SPN** | sialophorin |
| **SPARCL1** | SPARC-like 1 (hevin) |
| **RCN2** | reticulocalbin 2, EF-hand calcium binding domain |
| **SEC63** | SEC63 homolog (S. cerevisiae) |
| **UNC50** | unc-50 homolog (C. elegans) |
| **PRADC1** | protease-associated domain containing 1 |
| **PDIA6** | protein disulfide isomerase family A, member 6 |
| **WLS** | wntless homolog (Drosophila) |
| **VSIG10** | V-set and immunoglobulin domain containing 10 |
| **NDUFB3** | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 3, 12kDa |
| **POGLUT1** | protein O-glucosyltransferase 1 |
| **CYP2R1** | cytochrome P450, family 2, subfamily R, polypeptide 1 |
| **IFNGR1** | interferon gamma receptor 1 |
| **SNX13** | sorting nexin 13 |
| **SCARB2** | scavenger receptor class B, member 2 |
| **TBXA2R** | thromboxane A2 receptor |
| **FAM134C** | family with sequence similarity 134, member C |
| **BMP7** | bone morphogenetic protein 7 |
| **C11orf10** | chromosome 11 open reading frame 10 |
| **LRRN4** | leucine rich repeat neuronal 4 |
| **ERO1L** | ERO1-like (S. cerevisiae) |
| **SLC35F1** | solute carrier family 35, member F1 |
| **SLC25A22** | solute carrier family 25 (mitochondrial carrier: glutamate), member 22 |
| **LEMD3** | LEM domain containing 3 |
| **ACVR1B** | activin A receptor, type IB |
| **ARMCX6** | armadillo repeat containing, X-linked 6 |
| **KIAA1324** | KIAA1324 |
| **DKK3** | dickkopf homolog 3 (Xenopus laevis) |
| **COX4I1** | cytochrome c oxidase subunit IV isoform 1 |
| **SLC35A5** | solute carrier family 35, member A5 |
| **THBD** | thrombomodulin |
| **CABLES1** | Cdk5 and Abl enzyme substrate 1 |
| **TMEM41A** | transmembrane protein 41A |
| **SMCR7L** | Smith-Magenis syndrome chromosome region, candidate 7-like |

| | |
|---|---|
| **ERAP1** | endoplasmic reticulum aminopeptidase 1 |
| **LRCH1** | leucine-rich repeats and calponin homology (CH) domain containing 1 |
| **LRRC8B** | leucine rich repeat containing 8 family, member B |
| **SLC6A6** | solute carrier family 6 (neurotransmitter transporter, taurine), member 6 |
| **PIGS** | phosphatidylinositol glycan anchor biosynthesis, class S |
| **ADCY6** | adenylate cyclase 6 |
| **TRPC1** | transient receptor potential cation channel, subfamily C, member 1 |
| **SLC38A7** | solute carrier family 38, member 7 |
| **MEGF8** | multiple EGF-like-domains 8 |
| **ZDHHC20** | zinc finger, DHHC-type containing 20 |
| **C10orf111** | chromosome 10 open reading frame 111 |
| **EPHA10** | EPH receptor A10 |
| **ALG6** | asparagine-linked glycosylation 6, alpha-1,3-glucosyltransferase homolog (S. cerevisiae) |
| **PEAR1** | platelet endothelial aggregation receptor 1 |
| **FLRT2** | fibronectin leucine rich transmembrane protein 2 |
| **TMEM161B** | transmembrane protein 161B |
| **TRDN** | triadin |
| **RECK** | reversion-inducing-cysteine-rich protein with kazal motifs |
| **LILRB3** | leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 |
| **IGF1R** | insulin-like growth factor 1 receptor |
| **CCDC126** | coiled-coil domain containing 126 |
| **GALNTL4** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 4 |
| **CHST7** | carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7 |
| **EFNA1** | ephrin-A1 |
| **MFN2** | mitofusin 2 |
| **ESM1** | endothelial cell-specific molecule 1 |
| **LRRC70** | leucine rich repeat containing 70 |
| **EFEMP1** | EGF containing fibulin-like extracellular matrix protein 1 |
| **C14orf2** | chromosome 14 open reading frame 2 |
| **HYAL2** | hyaluronoglucosaminidase 2 |
| **P2RY2** | purinergic receptor P2Y, G-protein coupled, 2 |
| **CYP11B1** | cytochrome P450, family 11, subfamily B, polypeptide 1 |
| **SPCS3** | signal peptidase complex subunit 3 homolog (S. cerevisiae) |
| **QRFPR** | pyroglutamylated RFamide peptide receptor |
| **TMEM189-UBE2V1** | TMEM189-UBE2V1 readthrough |
| **LHFP** | lipoma HMGIC fusion partner |
| **SLC30A7** | solute carrier family 30 (zinc transporter), member 7 |
| **FCGR2A** | Fc fragment of IgG, low affinity IIa, receptor (CD32) |
| **PGAP3** | post-GPI attachment to proteins 3 |
| **DEGS1** | degenerative spermatocyte homolog 1, lipid desaturase (Drosophila) |
| **TRPV2** | transient receptor potential cation channel, subfamily V, member 2 |
| **C3orf58** | chromosome 3 open reading frame 58 |
| **C14orf101** | chromosome 14 open reading frame 101 |

| | |
|---|---|
| **SFXN4** | sideroflexin 4 |
| **NUBPL** | nucleotide binding protein-like |
| **TMEM164** | transmembrane protein 164 |
| **WFDC8** | WAP four-disulfide core domain 8 |
| **B4GALT1** | UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1 |
| **STOML3** | stomatin (EPB72)-like 3 |
| **SYT9** | synaptotagmin IX |
| **ERO1LB** | ERO1-like beta (S. cerevisiae) |
| **PKD1L1** | polycystic kidney disease 1 like 1 |
| **RXFP1** | relaxin/insulin-like family peptide receptor 1 |
| **ANGPTL7** | angiopoietin-like 7 |
| **LOC100509247** | hypothetical protein LOC100509247 |
| **C1QA** | complement component 1, q subcomponent, A chain |
| **IL12RB1** | interleukin 12 receptor, beta 1 |
| **DPY19L1** | dpy-19-like 1 (C. elegans) |
| **SLC27A3** | solute carrier family 27 (fatty acid transporter), member 3 |
| **TMTC1** | transmembrane and tetratricopeptide repeat containing 1 |
| **EDEM3** | ER degradation enhancer, mannosidase alpha-like 3 |
| **ESAM** | endothelial cell adhesion molecule |
| **COX10** | COX10 homolog, cytochrome c oxidase assembly protein, heme A: farnesyltransferase (yeast) |
| **P4HA2** | prolyl 4-hydroxylase, alpha polypeptide II |
| **SEMA6C** | sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6C |
| **B3GALTL** | beta 1,3-galactosyltransferase-like |
| **PHTF2** | putative homeodomain transcription factor 2 |
| **MRPL47** | mitochondrial ribosomal protein L47 |
| **COLEC12** | collectin sub-family member 12 |
| **CD46** | CD46 molecule, complement regulatory protein |
| **GNPTAB** | N-acetylglucosamine-1-phosphate transferase, alpha and beta subunits |
| **TMEM55A** | transmembrane protein 55A |
| **SPPL3** | signal peptide peptidase-like 3 |
| **TYW1** | tRNA-yW synthesizing protein 1 homolog (S. cerevisiae) |
| **LETM1** | leucine zipper-EF-hand containing transmembrane protein 1 |
| **VAMP3** | vesicle-associated membrane protein 3 (cellubrevin) |
| **TBC1D20** | TBC1 domain family, member 20 |
| **APLP2** | amyloid beta (A4) precursor-like protein 2 |
| **ADAM15** | ADAM metallopeptidase domain 15 |
| **CPXM2** | carboxypeptidase X (M14 family), member 2 |
| **CLN8** | ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) |
| **LPAR6** | lysophosphatidic acid receptor 6 |
| **DAD1** | defender against cell death 1 |
| **CPT1C** | carnitine palmitoyltransferase 1C |
| **ACSL5** | acyl-CoA synthetase long-chain family member 5 |
| **WDR33** | WD repeat domain 33 |
| **PRSS3** | protease, serine, 3 |
| **TMCC3** | transmembrane and coiled-coil domain family 3 |

| | |
|---|---|
| **CACHD1** | cache domain containing 1 |
| **C7orf23** | chromosome 7 open reading frame 23 |
| **C2CD2** | C2 calcium-dependent domain containing 2 |
| **SEC11C** | SEC11 homolog C (S. cerevisiae) |
| **RNF34** | ring finger protein 34 |
| **GOSR1** | golgi SNAP receptor complex member 1 |
| **CHIC1** | cysteine-rich hydrophobic domain 1 |
| **PRAP1** | proline-rich acidic protein 1 |
| **PTGS1** | prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) |
| **FDPS** | farnesyl diphosphate synthase |
| **NIPA2** | non imprinted in Prader-Willi/Angelman syndrome 2 |
| **ITFG1** | integrin alpha FG-GAP repeat containing 1 |
| **THSD4** | thrombospondin, type I, domain containing 4 |
| **TAPBP** | TAP binding protein (tapasin) |
| **MRPS18C** | mitochondrial ribosomal protein S18C |
| **POMT2** | protein-O-mannosyltransferase 2 |
| **LMLN** | leishmanolysin-like (metallopeptidase M8 family) |
| **ARSD** | arylsulfatase D |
| **TM7SF3** | transmembrane 7 superfamily member 3 |
| **NDUFA13** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13 |
| **UST** | uronyl-2-sulfotransferase |
| **AGPAT5** | 1-acylglycerol-3-phosphate O-acyltransferase 5 (lysophosphatidic acid acyltransferase, epsilon) |
| **FBXW7** | F-box and WD repeat domain containing 7 |
| **GPR65** | G protein-coupled receptor 65 |
| **ZDHHC6** | zinc finger, DHHC-type containing 6 |
| **NME3** | non-metastatic cells 3, protein expressed in |
| **SLC30A6** | solute carrier family 30 (zinc transporter), member 6 |
| **TMEM204** | transmembrane protein 204 |
| **TMEM183B** | transmembrane protein 183B |
| **O3FAR1** | omega-3 fatty acid receptor 1 |
| **C18orf56** | chromosome 18 open reading frame 56 |
| **SCPEP1** | serine carboxypeptidase 1 |
| **SLC8A3** | solute carrier family 8 (sodium/calcium exchanger), member 3 |
| **ACP1** | acid phosphatase 1, soluble |
| **C7orf44** | chromosome 7 open reading frame 44 |
| **MANSC1** | MANSC domain containing 1 |
| **NDUFA4** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4, 9kDa |
| **LIFR** | leukemia inhibitory factor receptor alpha |
| **SRSF8** | serine/arginine-rich splicing factor 8 |
| **MRPL32** | mitochondrial ribosomal protein L32 |
| **TUBD1** | tubulin, delta 1 |
| **SPTLC1** | serine palmitoyltransferase, long chain base subunit 1 |
| **PLA2G16** | phospholipase A2, group XVI |
| **UQCR10** | ubiquinol-cytochrome c reductase, complex III subunit X |

| | |
|---|---|
| **PTGFRN** | prostaglandin F2 receptor negative regulator |
| **PAM** | peptidylglycine alpha-amidating monooxygenase |
| **FAM134A** | family with sequence similarity 134, member A |
| **UBE2J1** | ubiquitin-conjugating enzyme E2, J1, U |
| **KIAA1549** | KIAA1549 |
| **AXL** | AXL receptor tyrosine kinase |
| **PVRL3** | poliovirus receptor-related 3 |
| **SDF2** | stromal cell-derived factor 2 |
| **ADAM10** | ADAM metallopeptidase domain 10 |
| **VAMP5** | vesicle-associated membrane protein 5 (myobrevin) |
| **TMEM30A** | transmembrane protein 30A |
| **SLC39A9** | solute carrier family 39 (zinc transporter), member 9 |
| **SELE** | selectin E |
| **GRPEL1** | GrpE-like 1, mitochondrial (E. coli) |
| **GPR171** | G protein-coupled receptor 171 |
| **LOC100652934** | hypothetical protein LOC100652934 |
| **LOC100506504** | hypothetical protein LOC100506504 |
| **BMP8A** | bone morphogenetic protein 8a |
| **GRIN2D** | glutamate receptor, ionotropic, N-methyl D-aspartate 2D |
| **LOC100506250** | NPIP-like protein 1-like |
| **SRRM1** | serine/arginine repetitive matrix 1 |
| **HIF3A** | hypoxia inducible factor 3, alpha subunit |
| **BTN3A2** | butyrophilin, subfamily 3, member A2 |
| **ABCD4** | ATP-binding cassette, sub-family D (ALD), member 4 |
| **PDGFA** | platelet-derived growth factor alpha polypeptide |
| **NCEH1** | neutral cholesterol ester hydrolase 1 |
| **VMP1** | vacuole membrane protein 1 |
| **PSENEN** | presenilin enhancer 2 homolog (C. elegans) |
| **IL17D** | interleukin 17D |
| **TMED2** | transmembrane emp24 domain trafficking protein 2 |

**Appendix Table A.3.4.2.** On this table are 698 candidate vascular targets that were filtered from the full 3,069 genes as those predicted to contain transmembrane and/or signal peptide domains. These genes are potentially accessible via the blood supply.

## Appendix Table A.3.5.1. Table of all genes with "AngioScore" results

| Gene | Product | Total abstracts | Angio Score |
|---|---|---|---|
| **CDH5** | cadherin 5, type 2 (vascular endothelium) | 115 | **90** |
| **ECSCR** | endothelial cell-specific chemotaxis regulator | 6 | **83** |
| **HIF3A** | hypoxia inducible factor 3, alpha subunit | 21 | **71** |
| **ANGPT4** | angiopoietin 4 | 25 | **68** |
| **ESM1** | endothelial cell-specific molecule 1 | 25 | **68** |
| **ANGPT2** | angiopoietin 2 | 225 | **66** |
| **PDPN** | podoplanin | 96 | **66** |
| **IGFBP7** | insulin-like growth factor binding protein 7 | 63 | **63** |
| **ADAM17** | ADAM metallopeptidase domain 17 | 194 | **63** |
| **TNFRSF1A** | tumor necrosis factor receptor superfamily, member 1A | 409 | **62** |
| **LECT1** | leukocyte cell derived chemotaxin 1 | 15 | **60** |
| **PEAR1** | platelet endothelial aggregation receptor 1 | 5 | **60** |
| **DLL4** | delta-like 4 (Drosophila) | 52 | **60** |
| **ENG** | endoglin | 242 | **59** |
| **HPSE** | heparanase | 193 | **58** |
| **PLXND1** | plexin D1 | 19 | **58** |
| **JAM3** | junctional adhesion molecule 3 | 46 | **57** |
| **RECK** | reversion-inducing-cysteine-rich protein with kazal motifs | 55 | **56** |
| **STAB1** | stabilin 1 | 30 | **53** |
| **SELE** | selectin E | 321 | **53** |
| **TNFRSF25** | tumor necrosis factor receptor superfamily, member 25 | 39 | **51** |
| **S1PR2** | sphingosine-1-phosphate receptor 2 | 32 | **50** |
| **IGFLR1** | IGF-like family receptor 1 | 2 | **50** |
| **VSIG1** | V-set and immunoglobulin domain containing 1 | 2 | **50** |
| **COLEC12** | collectin sub-family member 12 | 14 | **50** |
| **PLA2G16** | phospholipase A2, group XVI | 18 | **50** |
| **DKK3** | dickkopf homolog 3 (Xenopus laevis) | 69 | **49** |

| | | | |
|---|---|---|---|
| **CLDN15** | claudin 15 | 17 | **47** |
| **FBXW7** | F-box and WD repeat domain containing 7 | 126 | **46** |
| **ANGPTL2** | angiopoietin-like 2 | 16 | **44** |
| **THBD** | thrombomodulin | 181 | **43** |
| **SPARC** | secreted protein, acidic, cysteine-rich (osteonectin) | 177 | **41** |
| **AXL** | AXL receptor tyrosine kinase | 90 | **41** |
| **ULBP2** | UL16 binding protein 2 | 35 | **40** |
| **POSTN** | periostin, osteoblast specific factor | 80 | **40** |
| **SEMA3G** | sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3G | 10 | **40** |
| **EPHB2** | EPH receptor B2 | 107 | **39** |
| **PDGFB** | platelet-derived growth factor beta polypeptide | 203 | **39** |
| **APLN** | apelin | 89 | **38** |
| **GRAMD4** | GRAM domain containing 4 | 8 | **38** |
| **GLG1** | golgi glycoprotein 1 | 24 | **38** |
| **RNF34** | ring finger protein 34 | 16 | **38** |
| **SPINK7** | serine peptidase inhibitor, Kazal type 7 (putative) | 16 | **38** |
| **HTATIP2** | HIV-1 Tat interactive protein 2, 30kDa | 43 | **37** |
| **PXDN** | peroxidasin homolog (Drosophila) | 19 | **37** |
| **XKR6** | XK, Kell blood group complex subunit-related family, member 6 | 11 | **36** |
| **PCDH12** | protocadherin 12 | 11 | **36** |
| **NDUFA13** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13 | 47 | **36** |
| **LAMA4** | laminin, alpha 4 | 39 | **36** |
| **PTX3** | pentraxin 3, long | 121 | **36** |
| **ICAM2** | intercellular adhesion molecule 2 | 54 | **35** |
| **ADAM15** | ADAM metallopeptidase domain 15 | 60 | **35** |
| **EFNA1** | ephrin-A1 | 60 | **35** |
| **EPHB1** | EPH receptor B1 | 49 | **35** |
| **PDGFA** | platelet-derived growth factor alpha polypeptide | 105 | **34** |
| **FUT4** | fucosyltransferase 4 (alpha (1,3) fucosyltransferase, myeloid-specific) | 41 | **34** |

| | | | |
|---|---|---|---|
| **HYAL2** | hyaluronoglucosaminidase 2 | 44 | **34** |
| **SLC7A6** | solute carrier family 7 (amino acid transporter light chain, y+L system), member 6 | 12 | **33** |
| **SLC35F1** | solute carrier family 35, member F1 | 9 | **33** |
| **EXTL2** | exostoses (multiple)-like 2 | 12 | **33** |
| **FAM69B** | family with sequence similarity 69, member B | 3 | **33** |
| **JAG1** | jagged 1 | 151 | **32** |
| **UNC5B** | unc-5 homolog B (C. elegans) | 25 | **32** |
| **CLDN14** | claudin 14 | 22 | **32** |
| **JAG2** | jagged 2 | 38 | **32** |
| **IGF1R** | insulin-like growth factor 1 receptor | 515 | **30** |
| **TIMP4** | TIMP metallopeptidase inhibitor 4 | 43 | **30** |
| **ADAM10** | ADAM metallopeptidase domain 10 | 143 | **30** |
| **LY6G5B** | lymphocyte antigen 6 complex, locus G5B | 10 | **30** |
| **CLDN11** | claudin 11 | 27 | **30** |
| **MMP10** | matrix metallopeptidase 10 (stromelysin 2) | 61 | **30** |
| **ATG9B** | ATG9 autophagy related 9 homolog B (S. cerevisiae) | 17 | **29** |
| **HBEGF** | heparin-binding EGF-like growth factor | 133 | **29** |
| **FUT1** | fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase, H blood group) | 38 | **29** |
| **ESAM** | endothelial cell adhesion molecule | 14 | **29** |
| **SULF2** | sulfatase 2 | 28 | **29** |
| **MMP16** | matrix metallopeptidase 16 (membrane-inserted) | 35 | **29** |
| **PCDHGA7** | protocadherin gamma subfamily A, 7 | 7 | **29** |
| **ITIH5** | inter-alpha (globulin) inhibitor H5 | 14 | **29** |
| **BDKRB2** | bradykinin receptor B2 | 151 | **28** |
| **CXCR4** | chemokine (C-X-C motif) receptor 4 | 868 | **28** |
| **SPN** | sialophorin | 51 | **27** |
| **P2RY2** | purinergic receptor P2Y, G-protein coupled, 2 | 70 | **27** |
| **ITGA6** | integrin, alpha 6 | 159 | **27** |
| **VMP1** | vacuole membrane protein 1 | 19 | **26** |

| | | | |
|---|---|---|---|
| **CSMD1** | CUB and Sushi multiple domains 1 | 39 | **26** |
| **SLC36A4** | solute carrier family 36 (proton/amino acid symporter), member 4 | 4 | **25** |
| **TMEM161B** | transmembrane protein 161B | 4 | **25** |
| **CSMD3** | CUB and Sushi multiple domains 3 | 12 | **25** |
| **CCDC167** | coiled-coil domain containing 167 | 4 | **25** |
| **TMIGD2** | transmembrane and immunoglobulin domain containing 2 | 4 | **25** |
| **TNFSF8** | tumor necrosis factor (ligand) superfamily, member 8 | 28 | **25** |
| **APCDD1L** | adenomatosis polyposis coli down-regulated 1-like | 8 | **25** |
| **CABLES1** | Cdk5 and Abl enzyme substrate 1 | 28 | **25** |
| **FAM180A** | family with sequence similarity 180, member A | 4 | **25** |
| **DCD** | dermcidin | 45 | **24** |
| **EFNA5** | ephrin-A5 | 37 | **24** |
| **MMP1** | matrix metallopeptidase 1 (interstitial collagenase) | 597 | **24** |
| **PTAFR** | platelet-activating factor receptor | 66 | **24** |
| **CHST1** | carbohydrate (keratan sulfate Gal-6) sulfotransferase 1 | 21 | **24** |
| **TNFSF4** | tumor necrosis factor (ligand) superfamily, member 4 | 84 | **24** |
| **CCL20** | chemokine (C-C motif) ligand 20 | 114 | **24** |
| **CHST5** | carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 5 | 17 | **24** |
| **SLC6A6** | solute carrier family 6 (neurotransmitter transporter, taurine), member 6 | 26 | **23** |
| **PGAP3** | post-GPI attachment to proteins 3 | 13 | **23** |
| **TRPC1** | transient receptor potential cation channel, subfamily C, member 1 | 104 | **23** |
| **PVRL3** | poliovirus receptor-related 3 | 22 | **23** |
| **SPARCL1** | SPARC-like 1 (hevin) | 22 | **23** |
| **FAM57A** | family with sequence similarity 57, member A | 9 | **22** |
| **KIAA1549** | KIAA1549 | 9 | **22** |
| **CHODL** | chondrolectin | 9 | **22** |
| **CYYR1** | cysteine/tyrosine-rich 1 | 9 | **22** |
| **ITGA10** | integrin, alpha 10 | 9 | **22** |
| **ADAM19** | ADAM metallopeptidase domain 19 | 32 | **22** |

| | | | |
|---|---|---|---|
| **PRKD1** | protein kinase D1 | 128 | **22** |
| **TBXA2R** | thromboxane A2 receptor | 106 | **22** |
| **GPR65** | G protein-coupled receptor 65 | 14 | **21** |
| **P4HA2** | prolyl 4-hydroxylase, alpha polypeptide II | 24 | **21** |
| **BMP4** | bone morphogenetic protein 4 | 231 | **21** |
| **ABCC5** | ATP-binding cassette, sub-family C (CFTR/MRP), member 5 | 40 | **20** |
| **SLC35A5** | solute carrier family 35, member A5 | 5 | **20** |
| **TMEM60** | transmembrane protein 60 | 5 | **20** |
| **C17orf61** | chromosome 17 open reading frame 61 | 5 | **20** |
| **ETNK1** | ethanolamine kinase 1 | 10 | **20** |
| **SEMA4F** | sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4F | 15 | **20** |
| **CD96** | CD96 molecule | 10 | **20** |
| **FAT4** | FAT tumor suppressor homolog 4 (Drosophila) | 10 | **20** |
| **KIAA1324** | KIAA1324 | 10 | **20** |
| **LETM1** | leucine zipper-EF-hand containing transmembrane protein 1 | 20 | **20** |
| **TYW1** | tRNA-yW synthesizing protein 1 homolog (S. cerevisiae) | 10 | **20** |
| **LNX1** | ligand of numb-protein X 1 | 30 | **20** |
| **NRN1** | neuritin 1 | 10 | **20** |
| **PTGS1** | prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) | 191 | **20** |
| **FZD4** | frizzled family receptor 4 | 41 | **20** |
| **CCL22** | chemokine (C-C motif) ligand 22 | 72 | **19** |
| **DLL1** | delta-like 1 (Drosophila) | 62 | **19** |
| **WNT4** | wingless-type MMTV integration site family, member 4 | 57 | **19** |
| **BGN** | biglycan | 84 | **19** |
| **NFE2L3** | nuclear factor (erythroid-derived 2)-like 3 | 16 | **19** |
| **NME3** | non-metastatic cells 3, protein expressed in | 16 | **19** |
| **MMP15** | matrix metallopeptidase 15 (membrane-inserted) | 27 | **19** |
| **EFNA2** | ephrin-A2 | 27 | **19** |

| | | | |
|---|---|---|---|
| **ST8SIA4** | ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4 | 27 | **19** |
| **ATP11C** | ATPase, class VI, type 11C | 11 | **18** |
| **CHST7** | carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7 | 11 | **18** |
| **NMU** | neuromedin U | 22 | **18** |
| **TNFRSF21** | tumor necrosis factor receptor superfamily, member 21 | 22 | **18** |
| **NCEH1** | neutral cholesterol ester hydrolase 1 | 11 | **18** |
| **GZMH** | granzyme H (cathepsin G-like 2, protein h-CCPX) | 22 | **18** |
| **PRSS3** | protease, serine, 3 | 33 | **18** |
| **P4HA1** | prolyl 4-hydroxylase, alpha polypeptide I | 28 | **18** |
| **CETP** | cholesteryl ester transfer protein, plasma | 451 | **18** |
| **SLCO3A1** | solute carrier organic anion transporter family, member 3A1 | 17 | **18** |
| **SLC29A1** | solute carrier family 29 (nucleoside transporters), member 1 | 85 | **18** |
| **ADAMTS2** | ADAM metallopeptidase with thrombospondin type 1 motif, 2 | 17 | **18** |
| **C1QTNF5** | C1q and tumor necrosis factor related protein 5 | 17 | **18** |
| **FGF18** | fibroblast growth factor 18 | 34 | **18** |
| **GNRH1** | gonadotropin-releasing hormone 1 (luteinizing-releasing hormone) | 92 | **17** |
| **LY96** | lymphocyte antigen 96 | 92 | **17** |
| **EFEMP1** | EGF containing fibulin-like extracellular matrix protein 1 | 58 | **17** |
| **BMP7** | bone morphogenetic protein 7 | 164 | **17** |
| **DISP2** | dispatched homolog 2 (Drosophila) | 6 | **17** |
| **SLC38A7** | solute carrier family 38, member 7 | 6 | **17** |
| **SLC26A7** | solute carrier family 26, member 7 | 12 | **17** |
| **SLC20A1** | solute carrier family 20 (phosphate transporter), member 1 | 36 | **17** |
| **SLC35D2** | solute carrier family 35, member D2 | 6 | **17** |
| **RHBDF2** | rhomboid 5 homolog 2 (Drosophila) | 12 | **17** |
| **RXFP1** | relaxin/insulin-like family peptide receptor 1 | 48 | **17** |
| **DCHS1** | dachsous 1 (Drosophila) | 6 | **17** |
| **TMEM143** | transmembrane protein 143 | 6 | **17** |
| **C2CD2** | C2 calcium-dependent domain containing 2 | 6 | **17** |

| | | | |
|---|---|---|---|
| **DDR2** | discoidin domain receptor tyrosine kinase 2 | 36 | **17** |
| **FAM163A** | family with sequence similarity 163, member A | 6 | **17** |
| **PLXNA4** | plexin A4 | 18 | **17** |
| **SLC27A1** | solute carrier family 27 (fatty acid transporter), member 1 | 18 | **17** |
| **TPSG1** | tryptase gamma 1 | 6 | **17** |
| **BMP6** | bone morphogenetic protein 6 | 84 | **17** |
| **C17orf65** | chromosome 17 open reading frame 65 | 6 | **17** |
| **C18orf56** | chromosome 18 open reading frame 56 | 6 | **17** |
| **RLN2** | relaxin 2 | 54 | **17** |
| **ADCY6** | adenylate cyclase 6 | 49 | **16** |
| **B4GALT1** | UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1 | 51 | **16** |
| **ERAP1** | endoplasmic reticulum aminopeptidase 1 | 77 | **16** |
| **CMKLR1** | chemokine-like receptor 1 | 26 | **15** |
| **KCNH7** | potassium voltage-gated channel, subfamily H (eag-related), member 7 | 13 | **15** |
| **TMEM127** | transmembrane protein 127 | 13 | **15** |
| **TMEM189-UBE2V1** | TMEM189-UBE2V1 readthrough | 13 | **15** |
| **GLCE** | glucuronic acid epimerase | 13 | **15** |
| **PLA2G10** | phospholipase A2, group X | 33 | **15** |
| **ST3GAL3** | ST3 beta-galactoside alpha-2,3-sialyltransferase 3 | 20 | **15** |
| **VRK2** | vaccinia related kinase 2 | 20 | **15** |
| **REG3A** | regenerating islet-derived 3 alpha | 27 | **15** |
| **TYRO3** | TYRO3 protein tyrosine kinase | 34 | **15** |
| **PDCD1LG2** | programmed cell death 1 ligand 2 | 41 | **15** |
| **ACVR1B** | activin A receptor, type IB | 55 | **15** |
| **LIFR** | leukemia inhibitory factor receptor alpha | 55 | **15** |
| **GPR12** | G protein-coupled receptor 12 | 7 | **14** |
| **LPAR6** | lysophosphatidic acid receptor 6 | 28 | **14** |
| **RHBDF1** | rhomboid 5 homolog 1 (Drosophila) | 14 | **14** |

| | | | |
|---|---|---|---|
| **GPR37L1** | G protein-coupled receptor 37 like 1 | 7 | **14** |
| **TMEM204** | transmembrane protein 204 | 7 | **14** |
| **C7orf23** | chromosome 7 open reading frame 23 | 7 | **14** |
| **DPM3** | dolichyl-phosphate mannosyltransferase polypeptide 3 | 7 | **14** |
| **TM2D1** | TM2 domain containing 1 | 7 | **14** |
| **TMEM35** | transmembrane protein 35 | 7 | **14** |
| **TMEM100** | transmembrane protein 100 | 7 | **14** |
| **CPT1C** | carnitine palmitoyltransferase 1C | 21 | **14** |
| **TMCC3** | transmembrane and coiled-coil domain family 3 | 7 | **14** |
| **ARMCX6** | armadillo repeat containing, X-linked 6 | 7 | **14** |
| **GALNT4** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 4 (GalNAc-T4) | 14 | **14** |
| **LRFN4** | leucine rich repeat and fibronectin type III domain containing 4 | 7 | **14** |
| **PCDH8** | protocadherin 8 | 14 | **14** |
| **TUBD1** | tubulin, delta 1 | 14 | **14** |
| **CCRN4L** | CCR4 carbon catabolite repression 4-like (S. cerevisiae) | 7 | **14** |
| **EMILIN3** | elastin microfibril interfacer 3 | 7 | **14** |
| **EPHA10** | EPH receptor A10 | 7 | **14** |
| **JHDM1D** | jumonji C domain containing histone demethylase 1 homolog D (S. cerevisiae) | 7 | **14** |
| **RCN1** | reticulocalbin 1, EF-hand calcium binding domain | 21 | **14** |
| **GNAS** | GNAS complex locus | 306 | **13** |
| **MGST2** | microsomal glutathione S-transferase 2 | 15 | **13** |
| **IL20RB** | interleukin 20 receptor beta | 15 | **13** |
| **GLT25D1** | glycosyltransferase 25 domain containing 1 | 15 | **13** |
| **NRCAM** | neuronal cell adhesion molecule | 38 | **13** |
| **ADRA1B** | adrenergic, alpha-1B-, receptor | 55 | **13** |
| **TMEM164** | transmembrane protein 164 | 8 | **13** |
| **GJD3** | gap junction protein, delta 3, 31.9kDa | 8 | **13** |
| **IFI27** | interferon, alpha-inducible protein 27 | 32 | **13** |
| **PTPRE** | protein tyrosine phosphatase, receptor type, E | 40 | **13** |

| | | | |
|---|---|---|---|
| **TMEM30A** | transmembrane protein 30A | 16 | **13** |
| **TMEM55A** | transmembrane protein 55A | 8 | **13** |
| **COX16** | COX16 cytochrome c oxidase assembly homolog (S. cerevisiae) | 8 | **13** |
| **LRRN4** | leucine rich repeat neuronal 4 | 8 | **13** |
| **C14orf2** | chromosome 14 open reading frame 2 | 8 | **13** |
| **LUZP2** | leucine zipper protein 2 | 8 | **13** |
| **IL12B** | interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) | 333 | **12** |
| **PLOD1** | procollagen-lysine 1, 2-oxoglutarate 5-dioxygenase 1 | 41 | **12** |
| **TXNDC5** | thioredoxin domain containing 5 (endoplasmic reticulum) | 25 | **12** |
| **CD46** | CD46 molecule, complement regulatory protein | 151 | **12** |
| **IL7** | interleukin 7 | 151 | **12** |
| **CLEC4C** | C-type lectin domain family 4, member C | 17 | **12** |
| **IFNGR1** | interferon gamma receptor 1 | 146 | **12** |
| **CTSZ** | cathepsin Z | 26 | **12** |
| **TMTC1** | transmembrane and tetratricopeptide repeat containing 1 | 9 | **11** |
| **FZD8** | frizzled family receptor 8 | 18 | **11** |
| **QRFPR** | pyroglutamylated RFamide peptide receptor | 9 | **11** |
| **GDPD2** | glycerophosphodiester phosphodiesterase domain containing 2 | 9 | **11** |
| **ZDHHC20** | zinc finger, DHHC-type containing 20 | 9 | **11** |
| **SLC25A26** | solute carrier family 25, member 26 | 9 | **11** |
| **PCDHB7** | protocadherin beta 7 | 9 | **11** |
| **CSPG5** | chondroitin sulfate proteoglycan 5 (neuroglycan C) | 9 | **11** |
| **PTGFRN** | prostaglandin F2 receptor negative regulator | 18 | **11** |
| **CHIC1** | cysteine-rich hydrophobic domain 1 | 9 | **11** |
| **DNAJC10** | DnaJ (Hsp40) homolog, subfamily C, member 10 | 18 | **11** |
| **IL31RA** | interleukin 31 receptor A | 18 | **11** |
| **MEGF8** | multiple EGF-like-domains 8 | 9 | **11** |
| **SEMA3D** | sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3D | 9 | **11** |
| **CCDC149** | coiled-coil domain containing 149 | 9 | **11** |

| | | | |
|---|---|---|---|
| **CFI** | complement factor I | 63 | **11** |
| **IL17D** | interleukin 17D | 9 | **11** |
| **RAET1G** | retinoic acid early transcript 1G | 9 | **11** |
| **HRH1** | histamine receptor H1 | 73 | **11** |
| **SLC38A3** | solute carrier family 38, member 3 | 19 | **11** |
| **CBX2** | chromobox homolog 2 | 19 | **11** |
| **GFRA3** | GDNF family receptor alpha 3 | 19 | **11** |
| **PDSS1** | prenyl (decaprenyl) diphosphate synthase, subunit 1 | 19 | **11** |
| **PLXNA2** | plexin A2 | 29 | **10** |
| **SCARB2** | scavenger receptor class B, member 2 | 39 | **10** |
| **CYSLTR1** | cysteinyl leukotriene receptor 1 | 69 | **10** |
| **FCGR1A** | Fc fragment of IgG, high affinity Ia, receptor (CD64) | 89 | **10** |
| **ACP1** | acid phosphatase 1, soluble | 89 | **10** |
| **TRPV2** | transient receptor potential cation channel, subfamily V, member 2 | 30 | **10** |
| **LEMD2** | LEM domain containing 2 | 10 | **10** |
| **CD2** | CD2 molecule | 80 | **10** |
| **COX4I1** | cytochrome c oxidase subunit IV isoform 1 | 30 | **10** |
| **FAM134A** | family with sequence similarity 134, member A | 10 | **10** |
| **ODZ3** | odz, odd Oz/ten-m homolog 3 (Drosophila) | 10 | **10** |
| **PDIA6** | protein disulfide isomerase family A, member 6 | 40 | **10** |
| **TAPBP** | TAP binding protein (tapasin) | 71 | **10** |
| **LEPR** | leptin receptor | 377 | **10** |
| **HRH4** | histamine receptor H4 | 51 | **10** |
| **IL13RA1** | interleukin 13 receptor, alpha 1 | 41 | **10** |
| **SGCB** | sarcoglycan, beta (43kDa dystrophin-associated glycoprotein) | 31 | **10** |
| **DEFB1** | defensin, beta 1 | 124 | **10** |
| **CD8A** | CD8a molecule | 95 | **9** |
| **STX2** | syntaxin 2 | 32 | **9** |
| **DISP1** | dispatched homolog 1 (Drosophila) | 11 | **9** |

| | | | |
|---|---|---|---|
| **SLC44A3** | solute carrier family 44, member 3 | 11 | **9** |
| **KCNK2** | potassium channel, subfamily K, member 2 | 44 | **9** |
| **MARVELD3** | MARVEL domain containing 3 | 11 | **9** |
| **COX18** | COX18 cytochrome c oxidase assembly homolog (S. cerevisiae) | 11 | **9** |
| **MARCH1** | membrane-associated ring finger (C3HC4) 1 | 11 | **9** |
| **PCDHA9** | protocadherin alpha 9 | 11 | **9** |
| **B3GNT1** | UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 1 | 11 | **9** |
| **NDUFA1** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1, 7.5kDa | 22 | **9** |
| **VOPP1** | vesicular, overexpressed in cancer, prosurvival protein 1 | 22 | **9** |
| **EVC** | Ellis van Creveld syndrome | 22 | **9** |
| **PDZD8** | PDZ domain containing 8 | 11 | **9** |
| **SELK** | selenoprotein K | 11 | **9** |
| **SLC27A3** | solute carrier family 27 (fatty acid transporter), member 3 | 11 | **9** |
| **SCPEP1** | serine carboxypeptidase 1 | 11 | **9** |
| **CSF2RA** | colony stimulating factor 2 receptor, alpha, low-affinity (granulocyte-macrophage) | 56 | **9** |
| **GALNT1** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 1 (GalNAc-T1) | 34 | **9** |
| **PSAP** | prosaposin | 91 | **9** |
| **BSND** | Bartter syndrome, infantile, with sensorineural deafness (Barttin) | 23 | **9** |
| **VAMP8** | vesicle-associated membrane protein 8 (endobrevin) | 46 | **9** |
| **CYP11B1** | cytochrome P450, family 11, subfamily B, polypeptide 1 | 83 | **8** |
| **NIPA2** | non imprinted in Prader-Willi/Angelman syndrome 2 | 12 | **8** |
| **ATP2C2** | ATPase, Ca++ transporting, type 2C, member 2 | 12 | **8** |
| **DEGS1** | degenerative spermatocyte homolog 1, lipid desaturase (Drosophila) | 12 | **8** |
| **RHBDL2** | rhomboid, veinlet-like 2 (Drosophila) | 12 | **8** |
| **GRIN3A** | glutamate receptor, ionotropic, N-methyl-D-aspartate 3A | 60 | **8** |
| **PTPLA** | protein tyrosine phosphatase-like (proline instead of catalytic arginine), member A | 12 | **8** |
| **DAD1** | defender against cell death 1 | 24 | **8** |
| **GYPE** | glycophorin E (MNS blood group) | 12 | **8** |
| **BTN3A2** | butyrophilin, subfamily 3, member A2 | 12 | **8** |

| | | | |
|---|---|---|---|
| **ERO1L** | ERO1-like (S. cerevisiae) | 36 | **8** |
| **GORAB** | golgin, RAB6-interacting | 12 | **8** |
| **THSD4** | thrombospondin, type I, domain containing 4 | 12 | **8** |
| **FCGR2A** | Fc fragment of IgG, low affinity IIa, receptor (CD32) | 315 | **8** |
| **APLP2** | amyloid beta (A4) precursor-like protein 2 | 62 | **8** |
| **GLB1** | galactosidase, beta 1 | 87 | **8** |
| **SLC12A2** | solute carrier family 12 (sodium/potassium/chloride transporters), member 2 | 50 | **8** |
| **ST3GAL5** | ST3 beta-galactoside alpha-2,3-sialyltransferase 5 | 25 | **8** |
| **RPN2** | ribophorin II | 38 | **8** |
| **PAM** | peptidylglycine alpha-amidating monooxygenase | 38 | **8** |
| **JKAMP** | JNK1/MAPK8-associated membrane protein | 13 | **8** |
| **PHTF2** | putative homeodomain transcription factor 2 | 13 | **8** |
| **ANGPTL7** | angiopoietin-like 7 | 13 | **8** |
| **DHODH** | dihydroorotate dehydrogenase | 26 | **8** |
| **NDUFB3** | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 3, 12kDa | 13 | **8** |
| **PDIA5** | protein disulfide isomerase family A, member 5 | 13 | **8** |
| **SIAE** | sialic acid acetylesterase | 13 | **8** |
| **C1QA** | complement component 1, q subcomponent, A chain | 92 | **8** |
| **MS4A2** | membrane-spanning 4-domains, subfamily A, member 2 (Fc fragment of IgE, high affinity I, receptor for; beta polypeptide) | 93 | **8** |
| **TCN2** | transcobalamin II | 93 | **8** |
| **ABCB6** | ATP-binding cassette, sub-family B (MDR/TAP), member 6 | 28 | **7** |
| **ANO6** | anoctamin 6 | 14 | **7** |
| **SPPL3** | signal peptide peptidase-like 3 | 14 | **7** |
| **PAQR8** | progestin and adipoQ receptor family member VIII | 14 | **7** |
| **C11orf10** | chromosome 11 open reading frame 10 | 14 | **7** |
| **B3GALT2** | UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2 | 14 | **7** |
| **TMPRSS11D** | transmembrane protease, serine 11D | 14 | **7** |
| **BOC** | Boc homolog (mouse) | 14 | **7** |

| | | | |
|---|---|---|---|
| **FNDC3B** | fibronectin type III domain containing 3B | 14 | **7** |
| **NDST3** | N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 3 | 14 | **7** |
| **ARSB** | arylsulfatase B | 42 | **7** |
| **EDEM3** | ER degradation enhancer, mannosidase alpha-like 3 | 14 | **7** |
| **CSF2RB** | colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) | 86 | **7** |
| **ACSL5** | acyl-CoA synthetase long-chain family member 5 | 29 | **7** |
| **ATP5J2** | ATP synthase, H+ transporting, mitochondrial Fo complex, subunit F2 | 29 | **7** |
| **FANCM** | Fanconi anemia, complementation group M | 29 | **7** |
| **FDPS** | farnesyl diphosphate synthase | 44 | **7** |
| **O3FAR1** | omega-3 fatty acid receptor 1 | 15 | **7** |
| **CYB561** | cytochrome b-561 | 15 | **7** |
| **DERL2** | Der1-like domain family, member 2 | 15 | **7** |
| **APOL2** | apolipoprotein L, 2 | 15 | **7** |
| **UQCR10** | ubiquinol-cytochrome c reductase, complex III subunit X | 15 | **7** |
| **NPTX2** | neuronal pentraxin II | 15 | **7** |
| **CTLA4** | cytotoxic T-lymphocyte-associated protein 4 | 697 | **6** |
| **CD101** | CD101 molecule | 16 | **6** |
| **CNTNAP1** | contactin associated protein 1 | 16 | **6** |
| **MDFIC** | MyoD family inhibitor domain containing | 16 | **6** |
| **PCDH15** | protocadherin-related 15 | 33 | **6** |
| **CHRNA5** | cholinergic receptor, nicotinic, alpha 5 | 120 | **6** |
| **GRIA3** | glutamate receptor, ionotrophic, AMPA 3 | 52 | **6** |
| **MFN2** | mitofusin 2 | 87 | **6** |
| **GPC5** | glypican 5 | 35 | **6** |
| **AGPAT5** | 1-acylglycerol-3-phosphate O-acyltransferase 5 (lysophosphatidic acid acyltransferase, epsilon) | 18 | **6** |
| **FUT9** | fucosyltransferase 9 (alpha (1,3) fucosyltransferase) | 18 | **6** |
| **ART3** | ADP-ribosyltransferase 3 | 18 | **6** |
| **ADCY8** | adenylate cyclase 8 (brain) | 37 | **5** |
| **PSENEN** | presenilin enhancer 2 homolog (C. elegans) | 37 | **5** |

| | | | |
|---|---|---|---|
| **SPTLC1** | serine palmitoyltransferase, long chain base subunit 1 | 37 | **5** |
| **COX10** | COX10 homolog, cytochrome c oxidase assembly protein, heme A: farnesyltransferase (yeast) | 19 | **5** |
| **LILRB3** | leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 | 19 | **5** |
| **RPN1** | ribophorin I | 38 | **5** |
| **UBE2J1** | ubiquitin-conjugating enzyme E2, J1, U | 19 | **5** |
| **ERO1LB** | ERO1-like beta (S. cerevisiae) | 19 | **5** |
| **HEXB** | hexosaminidase B (beta polypeptide) | 77 | **5** |
| **IL12RB1** | interleukin 12 receptor, beta 1 | 79 | **5** |
| **SCN3A** | sodium channel, voltage-gated, type III, alpha subunit | 20 | **5** |
| **WLS** | wntless homolog (Drosophila) | 20 | **5** |
| **FPR3** | formyl peptide receptor 3 | 20 | **5** |
| **ROM1** | retinal outer segment membrane protein 1 | 20 | **5** |
| **RCN2** | reticulocalbin 2, EF-hand calcium binding domain | 20 | **5** |
| **SLC8A3** | solute carrier family 8 (sodium/calcium exchanger), member 3 | 21 | **5** |
| **MARVELD2** | MARVEL domain containing 2 | 21 | **5** |
| **TAOK2** | TAO kinase 2 | 21 | **5** |
| **ATP1B3** | ATPase, Na+/K+ transporting, beta 3 polypeptide | 21 | **5** |
| **COL9A1** | collagen, type IX, alpha 1 | 42 | **5** |
| **IL12RB2** | interleukin 12 receptor, beta 2 | 64 | **5** |
| **MERTK** | c-mer proto-oncogene tyrosine kinase | 65 | **5** |
| **ADCY3** | adenylate cyclase 3 | 44 | **5** |
| **MGST3** | microsomal glutathione S-transferase 3 | 22 | **5** |
| **PIGT** | phosphatidylinositol glycan anchor biosynthesis, class T | 22 | **5** |
| **DTNA** | dystrobrevin, alpha | 44 | **5** |
| **SEC63** | SEC63 homolog (S. cerevisiae) | 23 | **4** |
| **SLC7A7** | solute carrier family 7 (amino acid transporter light chain, y+L system), member 7 | 24 | **4** |
| **POMT2** | protein-O-mannosyltransferase 2 | 24 | **4** |
| **ACP2** | acid phosphatase 2, lysosomal | 24 | **4** |
| **IAPP** | islet amyloid polypeptide | 170 | **4** |

| | | | |
|---|---|---|---|
| **SLC36A1** | solute carrier family 36 (proton/amino acid symporter), member 1 | 25 | **4** |
| **NDUFB6** | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 6, 17kDa | 25 | **4** |
| **TRDN** | triadin | 25 | **4** |
| **SCN3B** | sodium channel, voltage-gated, type III, beta | 26 | **4** |
| **SLAMF6** | SLAM family member 6 | 26 | **4** |
| **HTR2A** | 5-hydroxytryptamine (serotonin) receptor 2A | 504 | **4** |
| **ATP6V0A2** | ATPase, H+ transporting, lysosomal V0 subunit a2 | 29 | **3** |
| **MLLT10** | myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 10 | 29 | **3** |
| **LGMN** | legumain | 29 | **3** |
| **STX8** | syntaxin 8 | 32 | **3** |
| **SGCE** | sarcoglycan, epsilon | 65 | **3** |
| **ADCY9** | adenylate cyclase 9 | 33 | **3** |
| **NR2E3** | nuclear receptor subfamily 2, group E, member 3 | 37 | **3** |
| **VAMP3** | vesicle-associated membrane protein 3 (cellubrevin) | 39 | **3** |
| **SRRM1** | serine/arginine repetitive matrix 1 | 39 | **3** |
| **GPR143** | G protein-coupled receptor 143 | 40 | **3** |
| **MCHR1** | melanin-concentrating hormone receptor 1 | 41 | **2** |
| **ORMDL3** | ORM1-like 3 (S. cerevisiae) | 42 | **2** |
| **CALU** | calumenin | 43 | **2** |
| **BACE1** | beta-site APP-cleaving enzyme 1 | 219 | **2** |
| **GRIN2D** | glutamate receptor, ionotropic, N-methyl D-aspartate 2D | 51 | **2** |
| **CCL3L1** | chemokine (C-C motif) ligand 3-like 1 | 51 | **2** |
| **CDKAL1** | CDK5 regulatory subunit associated protein 1-like 1 | 118 | **2** |
| **USH2A** | Usher syndrome 2A (autosomal recessive, mild) | 63 | **2** |
| **SLC6A4** | solute carrier family 6 (neurotransmitter transporter, serotonin), member 4 | 1421 | **1** |
| **NALCN** | sodium leak channel, non-selective | 13 | **0** |
| **GPR155** | G protein-coupled receptor 155 | 11 | **0** |
| **MARCH6** | membrane-associated ring finger (C3HC4) 6 | 15 | **0** |
| **PIGN** | phosphatidylinositol glycan anchor biosynthesis, class N | 12 | **0** |

| | | | |
|---|---|---|---|
| **SLC7A14** | solute carrier family 7 (orphan transporter), member 14 | 6 | **0** |
| **HIATL1** | hippocampus abundant transcript-like 1 | 8 | **0** |
| **PKD1L1** | polycystic kidney disease 1 like 1 | 7 | **0** |
| **PTCHD1** | patched domain containing 1 | 5 | **0** |
| **SLC46A3** | solute carrier family 46, member 3 | 6 | **0** |
| **SVOP** | SV2 related protein homolog (rat) | 2 | **0** |
| **SERINC1** | serine incorporator 1 | 12 | **0** |
| **SLC43A3** | solute carrier family 43, member 3 | 7 | **0** |
| **PKD1L3** | polycystic kidney disease 1-like 3 | 6 | **0** |
| **SLC4A8** | solute carrier family 4, sodium bicarbonate cotransporter, member 8 | 15 | **0** |
| **SERINC5** | serine incorporator 5 | 5 | **0** |
| **TMCO3** | transmembrane and coiled-coil domains 3 | 9 | **0** |
| **ALG6** | asparagine-linked glycosylation 6, alpha-1,3-glucosyltransferase homolog (S. cerevisiae) | 19 | **0** |
| **DPY19L1** | dpy-19-like 1 (C. elegans) | 4 | **0** |
| **MFSD11** | major facilitator superfamily domain containing 11 | 2 | **0** |
| **SLC2A14** | solute carrier family 2 (facilitated glucose transporter), member 14 | 6 | **0** |
| **SLC35G1** | solute carrier family 35, member G1 | 5 | **0** |
| **SLC41A2** | solute carrier family 41, member 2 | 7 | **0** |
| **TMTC4** | transmembrane and tetratricopeptide repeat containing 4 | 12 | **0** |
| **SLC24A5** | solute carrier family 24, member 5 | 16 | **0** |
| **C14orf135** | chromosome 14 open reading frame 135 | 8 | **0** |
| **TMEM104** | transmembrane protein 104 | 7 | **0** |
| **C14orf101** | chromosome 14 open reading frame 101 | 3 | **0** |
| **SEC61A2** | Sec61 alpha 2 subunit (S. cerevisiae) | 13 | **0** |
| **SLC35D1** | solute carrier family 35 (UDP-glucuronic acid/UDP-N-acetylgalactosamine dual transporter), member D1 | 12 | **0** |
| **SLC35E2B** | solute carrier family 35, member E2B | 6 | **0** |
| **SLC44A5** | solute carrier family 44, member 5 | 7 | **0** |
| **NPFFR2** | neuropeptide FF receptor 2 | 20 | **0** |
| **PQLC2** | PQ loop repeat containing 2 | 6 | **0** |

| | | | |
|---|---|---|---|
| **PRRT3** | proline-rich transmembrane protein 3 | 6 | **0** |
| **SLC39A9** | solute carrier family 39 (zinc transporter), member 9 | 12 | **0** |
| **TM7SF3** | transmembrane 7 superfamily member 3 | 11 | **0** |
| **ATP11A** | ATPase, class VI, type 11A | 12 | **0** |
| **GPR173** | G protein-coupled receptor 173 | 6 | **0** |
| **GPR63** | G protein-coupled receptor 63 | 9 | **0** |
| **PIGB** | phosphatidylinositol glycan anchor biosynthesis, class B | 12 | **0** |
| **RGR** | retinal G protein coupled receptor | 23 | **0** |
| **TRAM2** | translocation associated membrane protein 2 | 15 | **0** |
| **ZDHHC13** | zinc finger, DHHC-type containing 13 | 10 | **0** |
| **KCNK17** | potassium channel, subfamily K, member 17 | 12 | **0** |
| **SLC30A6** | solute carrier family 30 (zinc transporter), member 6 | 14 | **0** |
| **TMEM41A** | transmembrane protein 41A | 6 | **0** |
| **TMEM62** | transmembrane protein 62 | 7 | **0** |
| **CCRL2** | chemokine (C-C motif) receptor-like 2 | 14 | **0** |
| **GPR171** | G protein-coupled receptor 171 | 5 | **0** |
| **SAMD8** | sterile alpha motif domain containing 8 | 6 | **0** |
| **SLC30A7** | solute carrier family 30 (zinc transporter), member 7 | 22 | **0** |
| **TLCD1** | TLC domain containing 1 | 3 | **0** |
| **TMEM194A** | transmembrane protein 194A | 6 | **0** |
| **TMEM194B** | transmembrane protein 194B | 3 | **0** |
| **UNC50** | unc-50 homolog (C. elegans) | 10 | **0** |
| **XKR5** | XK, Kell blood group complex subunit-related family, member 5 | 1 | **0** |
| **CLN8** | ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) | 18 | **0** |
| **LPPR4** | lipid phosphate phosphatase-related protein type 4 | 8 | **0** |
| **CACNG2** | calcium channel, voltage-dependent, gamma subunit 2 | 29 | **0** |
| **CHRND** | cholinergic receptor, nicotinic, delta | 28 | **0** |
| **CKLF** | chemokine-like factor | 15 | **0** |
| **KRTCAP2** | keratinocyte associated protein 2 | 6 | **0** |

| | | | |
|---|---|---|---|
| **LHFP** | lipoma HMGIC fusion partner | 8 | **0** |
| **TMEM80** | transmembrane protein 80 | 2 | **0** |
| **TSPAN3** | tetraspanin 3 | 13 | **0** |
| **ABCD4** | ATP-binding cassette, sub-family D (ALD), member 4 | 18 | **0** |
| **CACNG8** | calcium channel, voltage-dependent, gamma subunit 8 | 6 | **0** |
| **FAM18A** | family with sequence similarity 18, member A | 2 | **0** |
| **FAM18B2** | family with sequence similarity 18, member B2 | 4 | **0** |
| **GJD4** | gap junction protein, delta 4, 40.1kDa | 3 | **0** |
| **LRRC8B** | leucine rich repeat containing 8 family, member B | 7 | **0** |
| **LRRC8C** | leucine rich repeat containing 8 family, member C | 10 | **0** |
| **SFXN4** | sideroflexin 4 | 16 | **0** |
| **SSR3** | signal sequence receptor, gamma (translocon-associated protein gamma) | 13 | **0** |
| **STEAP1B** | STEAP family member 1B | 2 | **0** |
| **TMEM43** | transmembrane protein 43 | 26 | **0** |
| **TSPAN5** | tetraspanin 5 | 9 | **0** |
| **YIPF5** | Yip1 domain family, member 5 | 20 | **0** |
| **ZDHHC6** | zinc finger, DHHC-type containing 6 | 9 | **0** |
| **ARSD** | arylsulfatase D | 10 | **0** |
| **CLCC1** | chloride channel CLIC-like 1 | 11 | **0** |
| **CNIH4** | cornichon homolog 4 (Drosophila) | 14 | **0** |
| **CNNM3** | cyclin M3 | 13 | **0** |
| **MCU** | mitochondrial calcium uniporter | 9 | **0** |
| **SLC25A43** | solute carrier family 25, member 43 | 5 | **0** |
| **TMEM179B** | transmembrane protein 179B | 3 | **0** |
| **FAM134C** | family with sequence similarity 134, member C | 9 | **0** |
| **FAM18B2-CDRT4** | FAM18B2-CDRT4 readthrough | 3 | **0** |
| **FAM26E** | family with sequence similarity 26, member E | 4 | **0** |
| **SLC35E2** | solute carrier family 35, member E2 | 3 | **0** |
| **LOC100506250** | NPIP-like protein 1-like | 0 | **0** |

| | | | |
|---|---|---|---|
| **ATP5G1** | ATP synthase, H+ transporting, mitochondrial Fo complex, subunit C1 (subunit 9) | 22 | **0** |
| **C19orf18** | chromosome 19 open reading frame 18 | 2 | **0** |
| **ITFG1** | integrin alpha FG-GAP repeat containing 1 | 8 | **0** |
| **KCNMB3** | potassium large conductance calcium-activated channel, subfamily M beta member 3 | 16 | **0** |
| **MARCH4** | membrane-associated ring finger (C3HC4) 4 | 7 | **0** |
| **MYCT1** | myc target 1 | 8 | **0** |
| **PIGS** | phosphatidylinositol glycan anchor biosynthesis, class S | 15 | **0** |
| **SHISA2** | shisa homolog 2 (Xenopus laevis) | 4 | **0** |
| **TMED2** | transmembrane emp24 domain trafficking protein 2 | 19 | **0** |
| **TMEM119** | transmembrane protein 119 | 5 | **0** |
| **VSIG10** | V-set and immunoglobulin domain containing 10 | 4 | **0** |
| **C5orf28** | chromosome 5 open reading frame 28 | 5 | **0** |
| **CD163L1** | CD163 molecule-like 1 | 9 | **0** |
| **ESYT1** | extended synaptotagmin-like protein 1 | 17 | **0** |
| **GNPTAB** | N-acetylglucosamine-1-phosphate transferase, alpha and beta subunits | 30 | **0** |
| **IGSF1** | immunoglobulin superfamily, member 1 | 15 | **0** |
| **LEMD3** | LEM domain containing 3 | 22 | **0** |
| **MARCH3** | membrane-associated ring finger (C3HC4) 3 | 7 | **0** |
| **NKPD1** | NTPase, KAP family P-loop domain containing 1 | 3 | **0** |
| **RNF182** | ring finger protein 182 | 7 | **0** |
| **RNF185** | ring finger protein 185 | 11 | **0** |
| **SERINC4** | serine incorporator 4 | 3 | **0** |
| **SNX13** | sorting nexin 13 | 12 | **0** |
| **TBC1D20** | TBC1 domain family, member 20 | 11 | **0** |
| **TMCC1** | transmembrane and coiled-coil domain family 1 | 10 | **0** |
| **TMEM169** | transmembrane protein 169 | 7 | **0** |
| **C15orf24** | chromosome 15 open reading frame 24 | 0 | **0** |
| **TMPRSS11BNL** | TMPRSS11B N terminal-like | 0 | **0** |
| **ARSK** | arylsulfatase family, member K | 5 | **0** |

| | | | |
|---|---|---|---|
| **B3GALTL** | beta 1,3-galactosyltransferase-like | 16 | **0** |
| **C10orf111** | chromosome 10 open reading frame 111 | 3 | **0** |
| **C1QTNF6** | C1q and tumor necrosis factor related protein 6 | 13 | **0** |
| **C3orf18** | chromosome 3 open reading frame 18 | 5 | **0** |
| **C3orf45** | chromosome 3 open reading frame 45 | 3 | **0** |
| **C7orf44** | chromosome 7 open reading frame 44 | 5 | **0** |
| **CCDC112** | coiled-coil domain containing 112 | 5 | **0** |
| **CCDC126** | coiled-coil domain containing 126 | 4 | **0** |
| **CCDC56** | coiled-coil domain containing 56 | 7 | **0** |
| **CDH23** | cadherin-related 23 | 47 | **0** |
| **CDSN** | corneodesmosin | 38 | **0** |
| **CEACAM21** | carcinoembryonic antigen-related cell adhesion molecule 21 | 4 | **0** |
| **CHST8** | carbohydrate (N-acetylgalactosamine 4-0) sulfotransferase 8 | 13 | **0** |
| **CPXM2** | carboxypeptidase X (M14 family), member 2 | 7 | **0** |
| **CYP2R1** | cytochrome P450, family 2, subfamily R, polypeptide 1 | 25 | **0** |
| **DEXI** | Dexi homolog (mouse) | 8 | **0** |
| **EDEM1** | ER degradation enhancer, mannosidase alpha-like 1 | 23 | **0** |
| **ELFN2** | extracellular leucine-rich repeat and fibronectin type III domain containing 2 | 11 | **0** |
| **ENPP5** | ectonucleotide pyrophosphatase/phosphodiesterase 5 (putative) | 5 | **0** |
| **FAM174B** | family with sequence similarity 174, member B | 4 | **0** |
| **FAM19A1** | family with sequence similarity 19 (chemokine (C-C motif)-like), member A1 | 10 | **0** |
| **FAM24B** | family with sequence similarity 24, member B | 4 | **0** |
| **FAM5B** | family with sequence similarity 5, member B | 7 | **0** |
| **FCRL6** | Fc receptor-like 6 | 7 | **0** |
| **FKBP7** | FK506 binding protein 7 | 9 | **0** |
| **GALNT10** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 10 (GalNAc-T10) | 8 | **0** |
| **GALNTL2** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 2 | 11 | **0** |
| **GLT8D1** | glycosyltransferase 8 domain containing 1 | 10 | **0** |
| **GNS** | glucosamine (N-acetyl)-6-sulfatase | 22 | **0** |

| | | | |
|---|---|---|---|
| **ISLR2** | immunoglobulin superfamily containing leucine-rich repeat 2 | 5 | **0** |
| **LMAN2L** | lectin, mannose-binding 2-like | 17 | **0** |
| **LMLN** | leishmanolysin-like (metallopeptidase M8 family) | 4 | **0** |
| **LOC100507050** | hypothetical LOC100507050 | 1 | **0** |
| **LOC147670** | hypothetical protein LOC147670 | 1 | **0** |
| **LRRC38** | leucine rich repeat containing 38 | 1 | **0** |
| **LRRC70** | leucine rich repeat containing 70 | 5 | **0** |
| **LY6G5C** | lymphocyte antigen 6 complex, locus G5C | 4 | **0** |
| **MANEAL** | mannosidase, endo-alpha-like | 4 | **0** |
| **MANSC1** | MANSC domain containing 1 | 5 | **0** |
| **MOGAT3** | monoacylglycerol O-acyltransferase 3 | 7 | **0** |
| **MUC21** | mucin 21, cell surface associated | 9 | **0** |
| **NDUFA4** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4, 9kDa | 12 | **0** |
| **NDUFA4L2** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4-like 2 | 5 | **0** |
| **NDUFB4** | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 4, 15kDa | 12 | **0** |
| **NPTXR** | neuronal pentraxin receptor | 12 | **0** |
| **PIGX** | phosphatidylinositol glycan anchor biosynthesis, class X | 9 | **0** |
| **PRADC1** | protease-associated domain containing 1 | 6 | **0** |
| **PRTG** | protogenin | 4 | **0** |
| **RPRML** | reprimo-like | 1 | **0** |
| **SCN2B** | sodium channel, voltage-gated, type II, beta | 15 | **0** |
| **SEC61G** | Sec61 gamma subunit | 12 | **0** |
| **SERF1B** | small EDRK-rich factor 1B (centromeric) | 6 | **0** |
| **SIGLEC8** | sialic acid binding Ig-like lectin 8 | 18 | **0** |
| **SPCS3** | signal peptidase complex subunit 3 homolog (S. cerevisiae) | 12 | **0** |
| **STOML3** | stomatin (EPB72)-like 3 | 7 | **0** |
| **SUSD1** | sushi domain containing 1 | 11 | **0** |
| **TMEM59L** | transmembrane protein 59-like | 5 | **0** |
| **TMEM98** | transmembrane protein 98 | 10 | **0** |

| | | | |
|---|---|---|---|
| **TTC13** | tetratricopeptide repeat domain 13 | 5 | **0** |
| **UPK3BL** | uroplakin 3B-like | 1 | **0** |
| **VAMP5** | vesicle-associated membrane protein 5 (myobrevin) | 7 | **0** |
| **LOC100509247** | hypothetical protein LOC100509247 | 0 | **0** |
| **ACBD5** | acyl-CoA binding domain containing 5 | 11 | **0** |
| **ASB11** | ankyrin repeat and SOCS box containing 11 | 5 | **0** |
| **BNIP1** | BCL2/adenovirus E1B 19kDa interacting protein 1 | 13 | **0** |
| **BTNL9** | butyrophilin-like 9 | 4 | **0** |
| **C18orf26** | chromosome 18 open reading frame 26 | 2 | **0** |
| **C1orf115** | chromosome 1 open reading frame 115 | 6 | **0** |
| **C2orf83** | chromosome 2 open reading frame 83 | 6 | **0** |
| **C6orf70** | chromosome 6 open reading frame 70 | 3 | **0** |
| **CACHD1** | cache domain containing 1 | 6 | **0** |
| **FAM105A** | family with sequence similarity 105, member A | 9 | **0** |
| **FER1L5** | fer-1-like 5 (C. elegans) | 3 | **0** |
| **FLRT2** | fibronectin leucine rich transmembrane protein 2 | 11 | **0** |
| **GALNTL4** | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 4 | 11 | **0** |
| **GOLGB1** | golgin B1 | 28 | **0** |
| **GOSR1** | golgi SNAP receptor complex member 1 | 24 | **0** |
| **GPD2** | glycerol-3-phosphate dehydrogenase 2 (mitochondrial) | 23 | **0** |
| **HERPUD2** | HERPUD family member 2 | 6 | **0** |
| **KLRC2** | killer cell lectin-like receptor subfamily C, member 2 | 26 | **0** |
| **LPCAT4** | lysophosphatidylcholine acyltransferase 4 | 9 | **0** |
| **LRCH1** | leucine-rich repeats and calponin homology (CH) domain containing 1 | 14 | **0** |
| **LRRC37A** | leucine rich repeat containing 37A | 7 | **0** |
| **LYSMD3** | LysM, putative peptidoglycan-binding, domain containing 3 | 7 | **0** |
| **MAN2A1** | mannosidase, alpha, class 2A, member 1 | 32 | **0** |
| **MILR1** | mast cell immunoglobulin-like receptor 1 | 2 | **0** |
| **SDK2** | sidekick homolog 2 (chicken) | 11 | **0** |

| | | | |
|---|---|---|---|
| **SEC11C** | SEC11 homolog C (S. cerevisiae) | 6 | **0** |
| **SEC22B** | SEC22 vesicle trafficking protein homolog B (S. cerevisiae) (gene/pseudogene) | 24 | **0** |
| **SEL1L3** | sel-1 suppressor of lin-12-like 3 (C. elegans) | 8 | **0** |
| **SGK196** | protein kinase-like protein SgK196 | 5 | **0** |
| **SLC25A22** | solute carrier family 25 (mitochondrial carrier: glutamate), member 22 | 14 | **0** |
| **SMCR7L** | Smith-Magenis syndrome chromosome region, candidate 7-like | 15 | **0** |
| **SPAG4** | sperm associated antigen 4 | 6 | **0** |
| **SYT9** | synaptotagmin IX | 13 | **0** |
| **TMEM183B** | transmembrane protein 183B | 2 | **0** |
| **TMEM53** | transmembrane protein 53 | 6 | **0** |
| **UST** | uronyl-2-sulfotransferase | 10 | **0** |
| **WDR33** | WD repeat domain 33 | 19 | **0** |
| **LOC100506504** | hypothetical protein LOC100506504 | 0 | **0** |
| **LOC100652934** | hypothetical protein LOC100652934 | 0 | **0** |
| **AGA** | aspartylglucosaminidase | 42 | **0** |
| **B3GALNT2** | beta-1,3-N-acetylgalactosaminyltransferase 2 | 6 | **0** |
| **BMP8A** | bone morphogenetic protein 8a | 5 | **0** |
| **C11orf45** | chromosome 11 open reading frame 45 | 3 | **0** |
| **C17orf72** | chromosome 17 open reading frame 72 | 3 | **0** |
| **C1orf54** | chromosome 1 open reading frame 54 | 7 | **0** |
| **C3orf58** | chromosome 3 open reading frame 58 | 9 | **0** |
| **C6orf57** | chromosome 6 open reading frame 57 | 6 | **0** |
| **CBLN4** | cerebellin 4 precursor | 7 | **0** |
| **CCDC85A** | coiled-coil domain containing 85A | 5 | **0** |
| **CECR5** | cat eye syndrome chromosome region, candidate 5 | 10 | **0** |
| **CYTL1** | cytokine-like 1 | 9 | **0** |
| **DAND5** | DAN domain family, member 5 | 5 | **0** |
| **ENPP6** | ectonucleotide pyrophosphatase/phosphodiesterase 6 | 5 | **0** |
| **FDX1L** | ferredoxin 1-like | 4 | **0** |

| | | | |
|---|---|---|---|
| **FOXRED2** | FAD-dependent oxidoreductase domain containing 2 | 9 | **0** |
| **FUT11** | fucosyltransferase 11 (alpha (1,3) fucosyltransferase) | 4 | **0** |
| **GREM2** | gremlin 2 | 12 | **0** |
| **GRPEL1** | GrpE-like 1, mitochondrial (E. coli) | 12 | **0** |
| **H6PD** | hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) | 35 | **0** |
| **HTN3** | histatin 3 | 33 | **0** |
| **KDELC1** | KDEL (Lys-Asp-Glu-Leu) containing 1 | 9 | **0** |
| **LCORL** | ligand dependent nuclear receptor corepressor-like | 18 | **0** |
| **LYG2** | lysozyme G-like 2 | 7 | **0** |
| **MRPL21** | mitochondrial ribosomal protein L21 | 11 | **0** |
| **MRPL24** | mitochondrial ribosomal protein L24 | 13 | **0** |
| **MRPL27** | mitochondrial ribosomal protein L27 | 13 | **0** |
| **MRPL32** | mitochondrial ribosomal protein L32 | 14 | **0** |
| **MRPL47** | mitochondrial ribosomal protein L47 | 8 | **0** |
| **MRPS18C** | mitochondrial ribosomal protein S18C | 11 | **0** |
| **MRPS24** | mitochondrial ribosomal protein S24 | 14 | **0** |
| **NANOGNB** | NANOG neighbor homeobox | 1 | **0** |
| **NTN5** | netrin 5 | 2 | **0** |
| **NUBPL** | nucleotide binding protein-like | 12 | **0** |
| **OLFML1** | olfactomedin-like 1 | 6 | **0** |
| **PAX1** | paired box 1 | 20 | **0** |
| **PISD** | phosphatidylserine decarboxylase | 19 | **0** |
| **PLAC9** | placenta-specific 9 | 4 | **0** |
| **POGLUT1** | protein O-glucosyltransferase 1 | 13 | **0** |
| **PRAP1** | proline-rich acidic protein 1 | 6 | **0** |
| **PRR23A** | proline rich 23A | 1 | **0** |
| **RBM24** | RNA binding motif protein 24 | 8 | **0** |
| **SDF2** | stromal cell-derived factor 2 | 7 | **0** |
| **SEMA6C** | sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6C | 10 | **0** |

| | | | |
|---|---|---|---|
| **SHE** | Src homology 2 domain containing E | 5 | **0** |
| **SRL** | sarcalumenin | 4 | **0** |
| **SRSF8** | serine/arginine-rich splicing factor 8 | 9 | **0** |
| **TTC9B** | tetratricopeptide repeat domain 9B | 2 | **0** |
| **UQCRQ** | ubiquinol-cytochrome c reductase, complex III subunit VII, 9.5kDa | 10 | **0** |
| **VWC2** | von Willebrand factor C domain containing 2 | 4 | **0** |
| **WFDC8** | WAP four-disulfide core domain 8 | 4 | **0** |
| **NCRUPAR** | non-protein coding RNA, upstream of F2R/PAR1 | 1 | **100** |
| **RAET1K** | retinoic acid early transcript 1K pseudogene | 1 | **100** |
| **TRAF3IP2-AS1** | TRAF3IP2 antisense RNA 1 (non-protein coding) | 1 | **100** |
| **HIF1A** | hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor) | 1367 | **90** |
| **VHL** | von Hippel-Lindau tumor suppressor | 427 | **75** |
| **VASH1** | vasohibin 1 | 26 | **73** |
| **NF2** | neurofibromin 2 (merlin) | 178 | **71** |
| **PTTG1** | pituitary tumor-transforming 1 | 127 | **69** |
| **DIRAS3** | DIRAS family, GTP-binding RAS-like 3 | 25 | **64** |
| **CYLD** | cylindromatosis (turban tumor syndrome) | 95 | **62** |
| **PTEN** | phosphatase and tensin homolog | 919 | **62** |
| **MYCN** | v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian) | 192 | **59** |
| **MDM4** | Mdm4 p53 binding protein homolog (mouse) | 127 | **58** |
| **ROBO4** | roundabout homolog 4, magic roundabout (Drosophila) | 26 | **58** |
| **TNFAIP8L2** | tumor necrosis factor, alpha-induced protein 8-like 2 | 7 | **57** |
| **ORAOV1** | oral cancer overexpressed 1 | 9 | **56** |
| **NDRG1** | N-myc downstream regulated 1 | 105 | **55** |
| **FOXM1** | forkhead box M1 | 101 | **53** |
| **GAGE1** | G antigen 1 | 15 | **53** |
| **PDCD4** | programmed cell death 4 (neoplastic transformation inhibitor) | 92 | **51** |
| **RB1** | retinoblastoma 1 | 718 | **51** |
| **AKR7A2P1** | aldo-keto reductase family 7, member A2 pseudogene 1 | 2 | **50** |

| | | | |
|---|---|---|---|
| **AOC4** | AOC3 pseudogene | 4 | **50** |
| **CCDC18** | coiled-coil domain containing 18 | 2 | **50** |
| **CXorf41** | chromosome X open reading frame 41 | 4 | **50** |
| **DSCR6** | Down syndrome critical region gene 6 | 2 | **50** |
| **LINC00204B** | unknown | 2 | **50** |
| **LOC100289130** | hypothetical LOC100289130 | 2 | **50** |
| **LOC645166** | lymphocyte-specific protein 1 pseudogene | 2 | **50** |
| **LOH12CR1** | loss of heterozygosity, 12, chromosomal region 1 | 4 | **50** |
| **LUST** | unknown | 2 | **50** |
| **LUZP6** | leucine zipper protein 6 | 2 | **50** |
| **MAGEA10** | melanoma antigen family A, 10 | 14 | **50** |
| **MIR17HG** | miR-17-92 cluster host gene (non-protein coding) | 20 | **50** |
| **NAP1L6** | nucleosome assembly protein 1-like 6 | 2 | **50** |
| **SEPT14** | septin 14 | 2 | **50** |
| **SLC25A53** | unknown | 2 | **50** |
| **STARD8** | StAR-related lipid transfer (START) domain containing 8 | 10 | **50** |
| **TMSB15B** | thymosin beta 15B | 6 | **50** |
| **PLAG1** | pleiomorphic adenoma gene 1 | 41 | **49** |
| **RBL2** | retinoblastoma-like 2 (p130) | 122 | **48** |
| **ZEB1** | zinc finger E-box binding homeobox 1 | 107 | **47** |
| **EBF3** | early B-cell factor 3 | 13 | **46** |
| **FILIP1L** | filamin A interacting protein 1-like | 13 | **46** |
| **ENOX2** | ecto-NOX disulfide-thiol exchanger 2 | 27 | **44** |
| **ADAMTS18** | ADAM metallopeptidase with thrombospondin type 1 motif, 18 | 16 | **44** |
| **TRAF6** | TNF receptor-associated factor 6 | 286 | **43** |
| **DAB2IP** | DAB2 interacting protein | 33 | **42** |
| **DAPK1** | death-associated protein kinase 1 | 132 | **42** |
| **SPRY4** | sprouty homolog 4 (Drosophila) | 19 | **42** |
| **HUNK** | hormonally up-regulated Neu-associated kinase | 12 | **42** |

| | | | |
|---|---|---|---|
| **MMRN1** | multimerin 1 | 24 | **42** |
| **NSMAF** | neutral sphingomyelinase (N-SMase) activation associated factor | 12 | **42** |
| **CRTC1** | CREB regulated transcription coactivator 1 | 53 | **42** |
| **FLI1** | Friend leukemia virus integration 1 | 81 | **41** |
| **TFE3** | transcription factor binding to IGHM enhancer 3 | 59 | **41** |
| **TNFAIP3** | tumor necrosis factor, alpha-induced protein 3 | 163 | **40** |
| **CDKN2D** | cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4) | 42 | **40** |
| **ADAMTS7** | ADAM metallopeptidase with thrombospondin type 1 motif, 7 | 10 | **40** |
| **KLLN** | killin, p53-regulated DNA replication inhibitor | 5 | **40** |
| **R3HDM2** | R3H domain containing 2 | 5 | **40** |
| **ZNFX1-AS1** | ZNFX1 antisense RNA 1 (non-protein coding) | 5 | **40** |
| **BRAF** | v-raf murine sarcoma viral oncogene homolog B1 | 751 | **39** |
| **TCEB1** | transcription elongation factor B (SIII), polypeptide 1 (15kDa, elongin C) | 94 | **39** |
| **PPP1R13B** | protein phosphatase 1, regulatory (inhibitor) subunit 13B | 28 | **39** |
| **GBP1** | guanylate binding protein 1, interferon-inducible | 41 | **39** |
| **SS18** | synovial sarcoma translocation, chromosome 18 | 41 | **39** |
| **BIRC5** | baculoviral IAP repeat containing 5 | 672 | **39** |
| **EZH2** | enhancer of zeste homolog 2 (Drosophila) | 239 | **38** |
| **BTG3** | BTG family, member 3 | 16 | **38** |
| **HEATR5B** | HEAT repeat containing 5B | 8 | **38** |
| **RASSF3** | Ras association (RalGDS/AF-6) domain family member 3 | 8 | **38** |
| **SSX3** | synovial sarcoma, X breakpoint 3 | 8 | **38** |
| **TNS3** | tensin 3 | 16 | **38** |
| **RARB** | retinoic acid receptor, beta | 155 | **37** |
| **E2F3** | E2F transcription factor 3 | 63 | **37** |
| **BMPER** | BMP binding endothelial regulator | 11 | **36** |
| **S100A13** | S100 calcium binding protein A13 | 33 | **36** |
| **CCNE1** | cyclin E1 | 224 | **36** |
| **KDM3A** | lysine (K)-specific demethylase 3A | 25 | **36** |

| | | | |
|---|---|---|---|
| **NRAS** | neuroblastoma RAS viral (v-ras) oncogene homolog | 200 | **36** |
| **HMMR** | hyaluronan-mediated motility receptor (RHAMM) | 56 | **36** |
| **MAPRE1** | microtubule-associated protein, RP/EB family, member 1 | 51 | **35** |
| **RBM6** | RNA binding motif protein 6 | 17 | **35** |
| **ARID4A** | AT rich interactive domain 4A (RBP1-like) | 23 | **35** |
| **GATA6** | GATA binding protein 6 | 75 | **35** |
| **CASP10** | caspase 10, apoptosis-related cysteine peptidase | 104 | **35** |
| **CKS2** | CDC28 protein kinase regulatory subunit 2 | 26 | **35** |
| **CEACAM5** | carcinoembryonic antigen-related cell adhesion molecule 5 | 87 | **34** |
| **BMI1** | BMI1 polycomb ring finger oncogene | 204 | **34** |
| **SERPINB9** | serpin peptidase inhibitor, clade B (ovalbumin), member 9 | 38 | **34** |
| **TCEB2** | transcription elongation factor B (SIII), polypeptide 2 (18kDa, elongin B) | 79 | **34** |
| **SPHK1** | sphingosine kinase 1 | 124 | **34** |
| **CASP8** | caspase 8, apoptosis-related cysteine peptidase | 528 | **34** |
| **C21orf37** | chromosome 21 open reading frame 37 | 3 | **33** |
| **CDKN2AIP** | CDKN2A interacting protein | 18 | **33** |
| **DKFZp686O1327** | hypothetical LOC401014 | 3 | **33** |
| **FDPSL2A** | MGC44478 | 3 | **33** |
| **HEY1** | hairy/enhancer-of-split related with YRPW motif 1 | 42 | **33** |
| **HEY2** | hairy/enhancer-of-split related with YRPW motif 2 | 30 | **33** |
| **IDNK** | unknown | 3 | **33** |
| **ITGB1BP1** | integrin beta 1 binding protein 1 | 24 | **33** |
| **KIAA1210** | KIAA1210 | 3 | **33** |
| **KRCC1** | lysine-rich coiled-coil 1 | 3 | **33** |
| **LINC00114** | unknown | 3 | **33** |
| **LOC100286844** | hypothetical LOC100286844 | 3 | **33** |
| **LOC284889** | hypothetical LOC284889 | 3 | **33** |
| **LOC400682** | zinc finger protein 100-like | 3 | **33** |
| **PHF16** | PHD finger protein 16 | 12 | **33** |

| | | | |
|---|---|---|---|
| **RBM14-RBM4** | RBM14-RBM4 readthrough | 3 | **33** |
| **RPS26P11** | ribosomal protein S26 pseudogene 11 | 3 | **33** |
| **TP73-AS1** | TP73 antisense RNA 1 (non-protein coding) | 3 | **33** |
| **TSPYL5** | TSPY-like 5 | 9 | **33** |
| **ZNF134** | zinc finger protein 134 | 3 | **33** |
| **ZNF217** | zinc finger protein 217 | 30 | **33** |
| **ZNF420** | zinc finger protein 420 | 6 | **33** |
| **FOXP1** | forkhead box P1 | 74 | **32** |
| **MTOR** | mechanistic target of rapamycin (serine/threonine kinase) | 650 | **32** |
| **OTUD7B** | OTU domain containing 7B | 22 | **32** |
| **FOXO1** | forkhead box O1 | 230 | **32** |
| **NOSTRIN** | nitric oxide synthase trafficker | 16 | **31** |
| **JMY** | junction mediating and regulatory protein, p53 cofactor | 13 | **31** |
| **ERG** | v-ets erythroblastosis virus E26 oncogene homolog (avian) | 144 | **31** |
| **CKAP2** | cytoskeleton associated protein 2 | 23 | **30** |
| **COL15A1** | collagen, type XV, alpha 1 | 20 | **30** |
| **ING3** | inhibitor of growth family, member 3 | 20 | **30** |
| **RIPK3** | receptor-interacting serine-threonine kinase 3 | 30 | **30** |
| **VWF** | von Willebrand factor | 557 | **30** |
| **MAPK8** | mitogen-activated protein kinase 8 | 578 | **29** |
| **SOX4** | SRY (sex determining region Y)-box 4 | 55 | **29** |
| **KIAA1524** | KIAA1524 | 31 | **29** |
| **BAG4** | BCL2-associated athanogene 4 | 21 | **29** |
| **BCL2L15** | BCL2-like 15 | 7 | **29** |
| **C12orf5** | chromosome 12 open reading frame 5 | 21 | **29** |
| **FAM13B** | family with sequence similarity 13, member B | 7 | **29** |
| **FNIP1** | folliculin interacting protein 1 | 7 | **29** |
| **HINT1** | histidine triad nucleotide binding protein 1 | 35 | **29** |
| **KANK3** | KN motif and ankyrin repeat domains 3 | 7 | **29** |

| | | | |
|---|---|---|---|
| **KANK4** | KN motif and ankyrin repeat domains 4 | 7 | **29** |
| **RASL10A** | RAS-like, family 10, member A | 7 | **29** |
| **RCBTB1** | regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 1 | 14 | **29** |
| **WDR55** | WD repeat domain 55 | 7 | **29** |
| **PBK** | PDZ binding kinase | 32 | **28** |
| **CCND2** | cyclin D2 | 107 | **28** |
| **CDKN3** | cyclin-dependent kinase inhibitor 3 | 25 | **28** |
| **GPI** | glucose-6-phosphate isomerase | 75 | **28** |
| **COL4A1** | collagen, type IV, alpha 1 | 122 | **28** |
| **NEUROD2** | neurogenic differentiation 2 | 18 | **28** |
| **FAM188A** | family with sequence similarity 188, member A | 11 | **27** |
| **RGCC** | unknown | 22 | **27** |
| **WHSC1** | Wolf-Hirschhorn syndrome candidate 1 | 44 | **27** |
| **CTCFL** | CCCTC-binding factor (zinc finger protein)-like | 37 | **27** |
| **CCNG1** | cyclin G1 | 26 | **27** |
| **WRAP53** | WD repeat containing, antisense to TP53 | 26 | **27** |
| **BTRC** | beta-transducin repeat containing | 171 | **27** |
| **CTNNA1** | catenin (cadherin-associated protein), alpha 1, 102kDa | 108 | **27** |
| **DACH1** | dachshund homolog 1 (Drosophila) | 41 | **27** |
| **CCDC88A** | coiled-coil domain containing 88A | 30 | **27** |
| **NDUFAF4** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, assembly factor 4 | 15 | **27** |
| **TEAD2** | TEA domain family member 2 | 15 | **27** |
| **ZNF652** | zinc finger protein 652 | 15 | **27** |
| **BRE** | brain and reproductive organ-expressed (TNFRSF1A modulator) | 38 | **26** |
| **CHEK2** | CHK2 checkpoint homolog (S. pombe) | 358 | **26** |
| **TTK** | TTK protein kinase | 69 | **26** |
| **MMP19** | matrix metallopeptidase 19 | 35 | **26** |
| **PLK4** | polo-like kinase 4 | 35 | **26** |
| **RALA** | v-ral simian leukemia viral oncogene homolog A (ras related) | 74 | **26** |

| | | | |
|---|---|---|---|
| **ADAMTS6** | ADAM metallopeptidase with thrombospondin type 1 motif, 6 | 8 | **25** |
| **ANKRD30BP2** | ankyrin repeat domain 30B pseudogene 2 | 4 | **25** |
| **ANKRD40** | ankyrin repeat domain 40 | 8 | **25** |
| **APITD1-CORT** | APITD1-CORT readthrough | 4 | **25** |
| **C10orf140** | chromosome 10 open reading frame 140 | 4 | **25** |
| **CMC2** | unknown | 8 | **25** |
| **DEPDC1B** | DEP domain containing 1B | 4 | **25** |
| **DLGAP5** | discs, large (Drosophila) homolog-associated protein 5 | 28 | **25** |
| **ERF** | Ets2 repressor factor | 20 | **25** |
| **FAM206A** | unknown | 4 | **25** |
| **HCG4** | HLA complex group 4 (non-protein coding) | 4 | **25** |
| **LCA5L** | Leber congenital amaurosis 5-like | 4 | **25** |
| **LOC100505702** | hypothetical LOC100505702 | 4 | **25** |
| **LOC646576** | hypothetical LOC646576 | 4 | **25** |
| **LOC654342** | lymphocyte-specific protein 1 pseudogene | 4 | **25** |
| **MESTIT1** | MEST intronic transcript 1, antisense RNA (non-protein coding) | 4 | **25** |
| **MLKL** | mixed lineage kinase domain-like | 8 | **25** |
| **NANOS1** | nanos homolog 1 (Drosophila) | 8 | **25** |
| **NKX2-8** | NK2 homeobox 8 | 8 | **25** |
| **NRIP3** | nuclear receptor interacting protein 3 | 8 | **25** |
| **OCIAD2** | OCIA domain containing 2 | 4 | **25** |
| **ONECUT2** | one cut homeobox 2 | 8 | **25** |
| **PBX4** | pre-B-cell leukemia homeobox 4 | 12 | **25** |
| **PCDHB19P** | protocadherin beta 19 pseudogene | 4 | **25** |
| **PINX1** | PIN2/TERF1 interacting, telomerase inhibitor 1 | 32 | **25** |
| **TNFAIP8L1** | tumor necrosis factor, alpha-induced protein 8-like 1 | 4 | **25** |
| **TTL** | tubulin tyrosine ligase | 8 | **25** |
| **ZNF320** | zinc finger protein 320 | 4 | **25** |
| **ZNF554** | zinc finger protein 554 | 4 | **25** |

| | | | |
|---|---|---|---|
| **PSMD10** | proteasome (prosome, macropain) 26S subunit, non-ATPase, 10 | 78 | **24** |
| **TOP2A** | topoisomerase (DNA) II alpha 170kDa | 251 | **24** |
| **PLS3** | plastin 3 | 29 | **24** |
| **SPRY1** | sprouty homolog 1, antagonist of FGF signaling (Drosophila) | 29 | **24** |
| **PIK3C2B** | phosphoinositide-3-kinase, class 2, beta polypeptide | 50 | **24** |
| **NR2F2** | nuclear receptor subfamily 2, group F, member 2 | 46 | **24** |
| **PDCD5** | programmed cell death 5 | 46 | **24** |
| **TGIF2** | TGFB-induced factor homeobox 2 | 21 | **24** |
| **IRAK2** | interleukin-1 receptor-associated kinase 2 | 38 | **24** |
| **YY1** | YY1 transcription factor | 187 | **24** |
| **ZNF175** | zinc finger protein 175 | 17 | **24** |
| **CEP55** | centrosomal protein 55kDa | 30 | **23** |
| **SKIL** | SKI-like oncogene | 60 | **23** |
| **NOS1** | nitric oxide synthase 1 (neuronal) | 266 | **23** |
| **CAPN2** | calpain 2, (m/II) large subunit | 91 | **23** |
| **PTGR1** | prostaglandin reductase 1 | 13 | **23** |
| **RBAK** | RB-associated KRAB zinc finger | 13 | **23** |
| **TBRG1** | transforming growth factor beta regulator 1 | 13 | **23** |
| **TAL1** | T-cell acute lymphocytic leukemia 1 | 87 | **23** |
| **MBD2** | methyl-CpG binding domain protein 2 | 74 | **23** |
| **CCNB1** | cyclin B1 | 244 | **23** |
| **CSNK1A1** | casein kinase 1, alpha 1 | 80 | **23** |
| **TJP1** | tight junction protein 1 (zona occludens 1) | 143 | **22** |
| **BCL2L11** | BCL2-like 11 (apoptosis facilitator) | 224 | **22** |
| **LLGL2** | lethal giant larvae homolog 2 (Drosophila) | 18 | **22** |
| **MPP3** | membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3) | 9 | **22** |
| **PHACTR3** | phosphatase and actin regulator 3 | 18 | **22** |
| **RUNDC3B** | RUN domain containing 3B | 9 | **22** |
| **SHROOM4** | shroom family member 4 | 9 | **22** |

| | | | |
|---|---|---|---|
| **TBX15** | T-box 15 | 9 | **22** |
| **TCF4** | transcription factor 4 | 90 | **22** |
| **UNC119B** | unc-119 homolog B (C. elegans) | 9 | **22** |
| **ZNF513** | zinc finger protein 513 | 9 | **22** |
| **ZWILCH** | Zwilch, kinetochore associated, homolog (Drosophila) | 9 | **22** |
| **RBX1** | ring-box 1, E3 ubiquitin protein ligase | 118 | **22** |
| **IKBKE** | inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase epsilon | 73 | **22** |
| **ZNF350** | zinc finger protein 350 | 37 | **22** |
| **HDAC2** | histone deacetylase 2 | 358 | **22** |
| **SMOX** | spermine oxidase | 28 | **21** |
| **ULK3** | unc-51-like kinase 3 (C. elegans) | 14 | **21** |
| **VIM** | vimentin | 238 | **21** |
| **CDK2** | cyclin-dependent kinase 2 | 407 | **21** |
| **DOK2** | docking protein 2, 56kDa | 38 | **21** |
| **MIR155HG** | MIR155 host gene (non-protein coding) | 19 | **21** |
| **PCBP4** | poly(rC) binding protein 4 | 19 | **21** |
| **PTPN14** | protein tyrosine phosphatase, non-receptor type 14 | 19 | **21** |
| **TRAIP** | TRAF interacting protein | 19 | **21** |
| **EEF1E1** | eukaryotic translation elongation factor 1 epsilon 1 | 24 | **21** |
| **FES** | feline sarcoma oncogene | 77 | **21** |
| **MAX** | MYC associated factor X | 88 | **20** |
| **LAMB1** | laminin, beta 1 | 64 | **20** |
| **C17orf76-AS1** | unknown | 10 | **20** |
| **C1orf135** | chromosome 1 open reading frame 135 | 5 | **20** |
| **C21orf49** | chromosome 21 open reading frame 49 | 5 | **20** |
| **CCDC23** | coiled-coil domain containing 23 | 5 | **20** |
| **CXorf22** | chromosome X open reading frame 22 | 5 | **20** |
| **FAM222B** | unknown | 5 | **20** |
| **GKAP1** | G kinase anchoring protein 1 | 5 | **20** |

| | | | |
|---|---|---|---|
| **GLTSCR1** | glioma tumor suppressor candidate region gene 1 | 10 | **20** |
| **GSDMC** | gasdermin C | 10 | **20** |
| **IFI16** | interferon, gamma-inducible protein 16 | 70 | **20** |
| **INPP5A** | inositol polyphosphate-5-phosphatase, 40kDa | 15 | **20** |
| **KANSL1L** | unknown | 5 | **20** |
| **KDM8** | unknown | 10 | **20** |
| **KIF13B** | kinesin family member 13B | 15 | **20** |
| **LPIN3** | lipin 3 | 5 | **20** |
| **ME2** | malic enzyme 2, NAD(+)-dependent, mitochondrial | 30 | **20** |
| **MRAS** | muscle RAS oncogene homolog | 25 | **20** |
| **MYZAP** | unknown | 5 | **20** |
| **OIP5** | Opa interacting protein 5 | 10 | **20** |
| **PHF3** | PHD finger protein 3 | 15 | **20** |
| **PPEF2** | protein phosphatase, EF-hand calcium binding domain 2 | 5 | **20** |
| **PRKCA** | protein kinase C, alpha | 575 | **20** |
| **SASS6** | spindle assembly 6 homolog (C. elegans) | 15 | **20** |
| **SCML1** | sex comb on midleg-like 1 (Drosophila) | 5 | **20** |
| **SEPW1** | selenoprotein W, 1 | 15 | **20** |
| **TBC1D16** | TBC1 domain family, member 16 | 5 | **20** |
| **TDRD7** | tudor domain containing 7 | 10 | **20** |
| **TEP1** | telomerase-associated protein 1 | 30 | **20** |
| **TRAF3IP2** | TRAF3 interacting protein 2 | 25 | **20** |
| **TTC7B** | tetratricopeptide repeat domain 7B | 5 | **20** |
| **TUBB6** | tubulin, beta 6 | 15 | **20** |
| **USP4** | ubiquitin specific peptidase 4 (proto-oncogene) | 35 | **20** |
| **WDPCP** | WD repeat containing planar cell polarity effector | 10 | **20** |
| **ZNF789** | zinc finger protein 789 | 5 | **20** |
| **ZNF792** | zinc finger protein 792 | 5 | **20** |
| **NFATC4** | nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4 | 46 | **20** |

| | | | |
|---|---|---|---|
| **KLF11** | Kruppel-like factor 11 | 31 | **19** |
| **PPP2R2A** | protein phosphatase 2, regulatory subunit B, alpha | 62 | **19** |
| **ARNTL2** | aryl hydrocarbon receptor nuclear translocator-like 2 | 26 | **19** |
| **WASF3** | WAS protein family, member 3 | 26 | **19** |
| **PIAS4** | protein inhibitor of activated STAT, 4 | 68 | **19** |
| **BCL9** | B-cell CLL/lymphoma 9 | 21 | **19** |
| **GCET2** | germinal center expressed transcript 2 | 21 | **19** |
| **RGS17** | regulator of G-protein signaling 17 | 21 | **19** |
| **FBN1** | fibrillin 1 | 237 | **19** |
| **ZFHX3** | zinc finger homeobox 3 | 37 | **19** |
| **NFATC1** | nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1 | 122 | **19** |
| **LMO2** | LIM domain only 2 (rhombotin-like 1) | 85 | **19** |
| **FABP5** | fatty acid binding protein 5 (psoriasis-associated) | 48 | **19** |
| **PATZ1** | POZ (BTB) and AT hook containing zinc finger 1 | 16 | **19** |
| **SMARCC1** | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 1 | 96 | **19** |
| **CHD1L** | chromodomain helicase DNA binding protein 1-like | 27 | **19** |
| **RBBP6** | retinoblastoma binding protein 6 | 27 | **19** |
| **IL33** | interleukin 33 | 92 | **18** |
| **BACH2** | BTB and CNC homology 1, basic leucine zipper transcription factor 2 | 38 | **18** |
| **DUT** | deoxyuridine triphosphatase | 38 | **18** |
| **PLCE1** | phospholipase C, epsilon 1 | 60 | **18** |
| **PIAS1** | protein inhibitor of activated STAT, 1 | 104 | **18** |
| **DNMT3A** | DNA (cytosine-5-)-methyltransferase 3 alpha | 126 | **18** |
| **BRCA2** | breast cancer 2, early onset | 1039 | **18** |
| **AGAP2** | ArfGAP with GTPase domain, ankyrin repeat and PH domain 2 | 33 | **18** |
| **BCL2L14** | BCL2-like 14 (apoptosis facilitator) | 22 | **18** |
| **EIF2C1** | eukaryotic translation initiation factor 2C, 1 | 44 | **18** |
| **LIMS1** | LIM and senescent cell antigen-like domains 1 | 44 | **18** |
| **MINA** | MYC induced nuclear antigen | 22 | **18** |

| | | | |
|---|---|---|---|
| **PHF15** | PHD finger protein 15 | 11 | **18** |
| **RPL19** | ribosomal protein L19 | 33 | **18** |
| **SKA2** | spindle and kinetochore associated complex subunit 2 | 11 | **18** |
| **ZNF124** | zinc finger protein 124 | 11 | **18** |
| **ZNF23** | zinc finger protein 23 (KOX 16) | 11 | **18** |
| **RAP1A** | RAP1A, member of RAS oncogene family | 139 | **18** |
| **DDX5** | DEAD (Asp-Glu-Ala-Asp) box polypeptide 5 | 95 | **18** |
| **NAA15** | N(alpha)-acetyltransferase 15, NatA auxiliary subunit | 28 | **18** |
| **UBE2V1** | ubiquitin-conjugating enzyme E2 variant 1 | 28 | **18** |
| **ANXA5** | annexin A5 | 119 | **18** |
| **CKS1B** | CDC28 protein kinase regulatory subunit 1B | 51 | **18** |
| **HSPE1** | heat shock 10kDa protein 1 (chaperonin 10) | 51 | **18** |
| **PUS10** | pseudouridylate synthase 10 | 17 | **18** |
| **ITCH** | itchy E3 ubiquitin protein ligase homolog (mouse) | 103 | **17** |
| **PPARA** | peroxisome proliferator-activated receptor alpha | 350 | **17** |
| **ELK4** | ELK4, ETS-domain protein (SRF accessory protein 1) | 23 | **17** |
| **FGF9** | fibroblast growth factor 9 (glia-activating factor) | 46 | **17** |
| **IQGAP1** | IQ motif containing GTPase activating protein 1 | 115 | **17** |
| **PLCD4** | phospholipase C, delta 4 | 23 | **17** |
| **CTSK** | cathepsin K | 104 | **17** |
| **CSNK2A1** | casein kinase 2, alpha 1 polypeptide | 451 | **17** |
| **SHFM1** | split hand/foot malformation (ectrodactyly) type 1 | 29 | **17** |
| **MAP1LC3B** | microtubule-associated protein 1 light chain 3 beta | 35 | **17** |
| **MYCL1** | v-myc myelocytomatosis viral oncogene homolog 1, lung carcinoma derived (avian) | 35 | **17** |
| **TAF15** | TAF15 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 68kDa | 47 | **17** |
| **S100A11** | S100 calcium binding protein A11 | 53 | **17** |
| **AFAP1L1** | actin filament associated protein 1-like 1 | 6 | **17** |
| **ARHGEF15** | Rho guanine nucleotide exchange factor (GEF) 15 | 12 | **17** |
| **ASUN** | unknown | 18 | **17** |

| | | | |
|---|---|---|---|
| **C11orf74** | chromosome 11 open reading frame 74 | 6 | **17** |
| **C8orf33** | chromosome 8 open reading frame 33 | 6 | **17** |
| **CABLES2** | Cdk5 and Abl enzyme substrate 2 | 6 | **17** |
| **CASP4** | caspase 4, apoptosis-related cysteine peptidase | 48 | **17** |
| **GAS5** | growth arrest-specific 5 (non-protein coding) | 6 | **17** |
| **HBXIP** | hepatitis B virus x interacting protein | 24 | **17** |
| **JMJD1C** | jumonji domain containing 1C | 24 | **17** |
| **KIAA2022** | KIAA2022 | 6 | **17** |
| **KIF7** | kinesin family member 7 | 12 | **17** |
| **MEAF6** | MYST/Esa1-associated factor 6 | 24 | **17** |
| **MOB1B** | unknown | 12 | **17** |
| **MRPL36** | mitochondrial ribosomal protein L36 | 12 | **17** |
| **NAV3** | neuron navigator 3 | 18 | **17** |
| **PGAM4** | phosphoglycerate mutase family member 4 | 6 | **17** |
| **POLQ** | polymerase (DNA directed), theta | 24 | **17** |
| **PPP4R1L** | protein phosphatase 4, regulatory subunit 1-like | 6 | **17** |
| **PTPN11** | protein tyrosine phosphatase, non-receptor type 11 | 438 | **17** |
| **RBMXL1** | RNA binding motif protein, X-linked-like 1 | 6 | **17** |
| **RBPJL** | recombination signal binding protein for immunoglobulin kappa J region-like | 6 | **17** |
| **RPP21** | ribonuclease P/MRP 21kDa subunit | 12 | **17** |
| **RTTN** | rotatin | 6 | **17** |
| **SAMD14** | sterile alpha motif domain containing 14 | 12 | **17** |
| **SEC1** | secretory blood group 1 | 6 | **17** |
| **SRGAP1** | SLIT-ROBO Rho GTPase activating protein 1 | 12 | **17** |
| **TCF15** | transcription factor 15 (basic helix-loop-helix) | 6 | **17** |
| **THEM4** | thioesterase superfamily member 4 | 12 | **17** |
| **TTLL5** | tubulin tyrosine ligase-like family, member 5 | 18 | **17** |
| **USP18** | ubiquitin specific peptidase 18 | 24 | **17** |
| **VEZF1** | vascular endothelial zinc finger 1 | 6 | **17** |

| | | | |
|---|---|---|---|
| **WNK3** | WNK lysine deficient protein kinase 3 | 24 | **17** |
| **ZNF521** | zinc finger protein 521 | 12 | **17** |
| **ZNF618** | zinc finger protein 618 | 6 | **17** |
| **PPP1R1B** | protein phosphatase 1, regulatory (inhibitor) subunit 1B | 73 | **16** |
| **NCOA2** | nuclear receptor coactivator 2 | 128 | **16** |
| **MAPK11** | mitogen-activated protein kinase 11 | 61 | **16** |
| **SMAD6** | SMAD family member 6 | 68 | **16** |
| **ERAP2** | endoplasmic reticulum aminopeptidase 2 | 25 | **16** |
| **PHF6** | PHD finger protein 6 | 25 | **16** |
| **PLEKHA1** | pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 1 | 25 | **16** |
| **SET** | SET nuclear oncogene | 113 | **16** |
| **MSH3** | mutS homolog 3 (E. coli) | 82 | **16** |
| **NOVA1** | neuro-oncological ventral antigen 1 | 19 | **16** |
| **TCF7L1** | transcription factor 7-like 1 (T-cell specific, HMG-box) | 19 | **16** |
| **ZFP91** | zinc finger protein 91 homolog (mouse) | 19 | **16** |
| **NEDD8** | neural precursor cell expressed, developmentally down-regulated 8 | 102 | **16** |
| **UHRF1** | ubiquitin-like with PHD and ring finger domains 1 | 64 | **16** |
| **ST13** | suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein) | 45 | **16** |
| **CDCA7** | cell division cycle associated 7 | 13 | **15** |
| **DPH5** | DPH5 homolog (S. cerevisiae) | 13 | **15** |
| **DPYSL4** | dihydropyrimidinase-like 4 | 13 | **15** |
| **DTL** | denticleless homolog (Drosophila) | 39 | **15** |
| **FAM208A** | unknown | 13 | **15** |
| **FANCB** | Fanconi anemia, complementation group B | 26 | **15** |
| **FBXL3** | F-box and leucine-rich repeat protein 3 | 13 | **15** |
| **PDE12** | phosphodiesterase 12 | 13 | **15** |
| **RRAGA** | Ras-related GTP binding A | 13 | **15** |
| **TSHZ1** | teashirt zinc finger homeobox 1 | 13 | **15** |
| **ZFP36L2** | zinc finger protein 36, C3H type-like 2 | 13 | **15** |

| | | | |
|---|---|---|---|
| **ZKSCAN3** | zinc finger with KRAB and SCAN domains 3 | 13 | **15** |
| **ZNF267** | zinc finger protein 267 | 13 | **15** |
| **CDK1** | cyclin-dependent kinase 1 | 478 | **15** |
| **TFDP1** | transcription factor Dp-1 | 46 | **15** |
| **KAT2B** | K(lysine) acetyltransferase 2B | 237 | **15** |
| **BRCC3** | BRCA1/BRCA2-containing complex, subunit 3 | 33 | **15** |
| **PKNOX1** | PBX/knotted 1 homeobox 1 | 33 | **15** |
| **CRK** | v-crk sarcoma virus CT10 oncogene homolog (avian) | 166 | **15** |
| **DAXX** | death-domain associated protein | 153 | **15** |
| **CENPF** | centromere protein F, 350/400kDa (mitosin) | 60 | **15** |
| **FOXN3** | forkhead box N3 | 20 | **15** |
| **PCGF6** | polycomb group ring finger 6 | 20 | **15** |
| **TOP1** | topoisomerase (DNA) I | 194 | **15** |
| **NFATC2** | nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 | 128 | **15** |
| **MAPKAPK5** | mitogen-activated protein kinase-activated protein kinase 5 | 27 | **15** |
| **MYCBP** | c-myc binding protein | 27 | **15** |
| **PFDN5** | prefoldin subunit 5 | 27 | **15** |
| **SH2B3** | SH2B adaptor protein 3 | 54 | **15** |
| **UBR1** | ubiquitin protein ligase E3 component n-recognin 1 | 34 | **15** |
| **NQO1** | NAD(P)H dehydrogenase, quinone 1 | 368 | **15** |
| **BUB3** | budding uninhibited by benzimidazoles 3 homolog (yeast) | 41 | **15** |
| **CASP8AP2** | caspase 8 associated protein 2 | 41 | **15** |
| **VCL** | vinculin | 110 | **15** |
| **SPTBN1** | spectrin, beta, non-erythrocytic 1 | 69 | **14** |
| **ATXN7L2** | ataxin 7-like 2 | 7 | **14** |
| **BCL7B** | B-cell CLL/lymphoma 7B | 14 | **14** |
| **C10orf76** | chromosome 10 open reading frame 76 | 7 | **14** |
| **FAM123A** | family with sequence similarity 123A | 7 | **14** |
| **FBXL20** | F-box and leucine-rich repeat protein 20 | 7 | **14** |

| | | | |
|---|---|---|---|
| **FGF11** | fibroblast growth factor 11 | 7 | **14** |
| **HYAL4** | hyaluronoglucosaminidase 4 | 7 | **14** |
| **IPCEF1** | interaction protein for cytohesin exchange factors 1 | 14 | **14** |
| **IRX5** | iroquois homeobox 5 | 7 | **14** |
| **JAK3** | Janus kinase 3 | 154 | **14** |
| **KLHL23** | kelch-like 23 (Drosophila) | 7 | **14** |
| **LYAR** | Ly1 antibody reactive homolog (mouse) | 21 | **14** |
| **NAGA** | N-acetylgalactosaminidase, alpha- | 28 | **14** |
| **NTPCR** | nucleoside-triphosphatase, cancer-related | 7 | **14** |
| **PARP14** | poly (ADP-ribose) polymerase family, member 14 | 14 | **14** |
| **PARP9** | poly (ADP-ribose) polymerase family, member 9 | 14 | **14** |
| **PBOV1** | prostate and breast cancer overexpressed 1 | 7 | **14** |
| **PGM3** | phosphoglucomutase 3 | 21 | **14** |
| **PIK3C3** | phosphoinositide-3-kinase, class 3 | 63 | **14** |
| **PLA2G4E** | phospholipase A2, group IVE | 7 | **14** |
| **PLXNB3** | plexin B3 | 14 | **14** |
| **PTPN21** | protein tyrosine phosphatase, non-receptor type 21 | 14 | **14** |
| **RALGAPA2** | Ral GTPase activating protein, alpha subunit 2 (catalytic) | 7 | **14** |
| **RNF207** | ring finger protein 207 | 7 | **14** |
| **SENP5** | SUMO1/sentrin specific peptidase 5 | 7 | **14** |
| **SHPRH** | SNF2 histone linker PHD RING helicase | 14 | **14** |
| **SPSB1** | splA/ryanodine receptor domain and SOCS box containing 1 | 21 | **14** |
| **TIA1** | TIA1 cytotoxic granule-associated RNA binding protein | 49 | **14** |
| **TRIM16** | tripartite motif containing 16 | 14 | **14** |
| **TSHZ2** | teashirt zinc finger homeobox 2 | 14 | **14** |
| **VAT1L** | vesicle amine transport protein 1 homolog (T. californica)-like | 7 | **14** |
| **WBP1L** | unknown | 14 | **14** |
| **YPEL2** | yippee-like 2 (Drosophila) | 7 | **14** |
| **MCPH1** | microcephalin 1 | 57 | **14** |

| | | | |
|---|---|---|---|
| **MT1A** | metallothionein 1A | 50 | **14** |
| **RAP1B** | RAP1B, member of RAS oncogene family | 50 | **14** |
| **RBBP4** | retinoblastoma binding protein 4 | 129 | **14** |
| **NR5A2** | nuclear receptor subfamily 5, group A, member 2 | 87 | **14** |
| **ZNRD1** | zinc ribbon domain containing 1 | 29 | **14** |
| **PARK7** | parkinson protein 7 | 196 | **14** |
| **DDX3X** | DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, X-linked | 73 | **14** |
| **JAZF1** | JAZF zinc finger 1 | 73 | **14** |
| **YWHAZ** | tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide | 241 | **14** |
| **KIF2A** | kinesin heavy chain member 2A | 22 | **14** |
| **MYLIP** | myosin regulatory light chain interacting protein | 22 | **14** |
| **SMARCE1** | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1 | 66 | **14** |
| **ZBTB33** | zinc finger and BTB domain containing 33 | 44 | **14** |
| **UBE2D2** | ubiquitin-conjugating enzyme E2D 2 | 59 | **14** |
| **RGS1** | regulator of G-protein signaling 1 | 37 | **14** |
| **BACH1** | BTB and CNC homology 1, basic leucine zipper transcription factor 1 | 52 | **13** |
| **ALPK1** | alpha-kinase 1 | 15 | **13** |
| **BPHL** | biphenyl hydrolase-like (serine hydrolase) | 15 | **13** |
| **NLRC5** | NLR family, CARD domain containing 5 | 15 | **13** |
| **RASAL2** | RAS protein activator like 2 | 15 | **13** |
| **SUDS3** | suppressor of defective silencing 3 homolog (S. cerevisiae) | 15 | **13** |
| **WDR20** | WD repeat domain 20 | 15 | **13** |
| **ZNF238** | zinc finger protein 238 | 15 | **13** |
| **CAMK2D** | calcium/calmodulin-dependent protein kinase II delta | 53 | **13** |
| **BRD7** | bromodomain containing 7 | 38 | **13** |
| **SH3KBP1** | SH3-domain kinase binding protein 1 | 76 | **13** |
| **PRKAG2** | protein kinase, AMP-activated, gamma 2 non-catalytic subunit | 77 | **13** |
| **DNAJA2** | DnaJ (Hsp40) homolog, subfamily A, member 2 | 31 | **13** |
| **GRB10** | growth factor receptor-bound protein 10 | 62 | **13** |

| | | | |
|---|---|---|---|
| **MAP3K10** | mitogen-activated protein kinase kinase kinase 10 | 31 | **13** |
| **RANBP9** | RAN binding protein 9 | 62 | **13** |
| **TAOK1** | TAO kinase 1 | 31 | **13** |
| **WWP2** | WW domain containing E3 ubiquitin protein ligase 2 | 39 | **13** |
| **FANCD2** | Fanconi anemia, complementation group D2 | 119 | **13** |
| **APPBP2** | amyloid beta precursor protein (cytoplasmic tail) binding protein 2 | 16 | **13** |
| **ARMCX4** | armadillo repeat containing, X-linked 4 | 8 | **13** |
| **BIVM** | basic, immunoglobulin-like variable motif containing | 8 | **13** |
| **BRD8** | bromodomain containing 8 | 32 | **13** |
| **CENPW** | centromere protein W | 16 | **13** |
| **CEP89** | centrosomal protein 89kDa | 8 | **13** |
| **CNTRL** | centriolin | 24 | **13** |
| **COMMD6** | COMM domain containing 6 | 8 | **13** |
| **FAM111A** | family with sequence similarity 111, member A | 8 | **13** |
| **KLHL6** | kelch-like 6 (Drosophila) | 8 | **13** |
| **LHX6** | LIM homeobox 6 | 16 | **13** |
| **LXN** | latexin | 8 | **13** |
| **MAFB** | v-maf musculoaponeurotic fibrosarcoma oncogene homolog B (avian) | 40 | **13** |
| **MCM8** | minichromosome maintenance complex component 8 | 24 | **13** |
| **MED12L** | mediator complex subunit 12-like | 8 | **13** |
| **NUMBL** | numb homolog (Drosophila)-like | 16 | **13** |
| **PLEKHG6** | pleckstrin homology domain containing, family G (with RhoGef domain) member 6 | 8 | **13** |
| **PURB** | purine-rich element binding protein B | 16 | **13** |
| **RPA4** | replication protein A4, 30kDa | 16 | **13** |
| **TIMM10** | translocase of inner mitochondrial membrane 10 homolog (yeast) | 16 | **13** |
| **TOMM6** | translocase of outer mitochondrial membrane 6 homolog (yeast) | 8 | **13** |
| **ZNF167** | zinc finger protein 167 | 8 | **13** |
| **ZNF225** | zinc finger protein 225 | 8 | **13** |
| **ZNF276** | zinc finger protein 276 | 8 | **13** |

| | | | |
|---|---|---|---|
| **ZNF512** | zinc finger protein 512 | 8 | **13** |
| **ZNF516** | zinc finger protein 516 | 8 | **13** |
| **JAK1** | Janus kinase 1 | 217 | **12** |
| **YWHAE** | tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon polypeptide | 162 | **12** |
| **ARHGEF7** | Rho guanine nucleotide exchange factor (GEF) 7 | 73 | **12** |
| **ETV6** | ets variant 6 | 156 | **12** |
| **PLCB4** | phospholipase C, beta 4 | 33 | **12** |
| **TBX1** | T-box 1 | 33 | **12** |
| **CBL** | Cas-Br-M (murine) ecotropic retroviral transforming sequence | 348 | **12** |
| **ARHGAP1** | Rho GTPase activating protein 1 | 50 | **12** |
| **CBY1** | chibby homolog 1 (Drosophila) | 25 | **12** |
| **CCNY** | cyclin Y | 25 | **12** |
| **DIAPH1** | diaphanous homolog 1 (Drosophila) | 50 | **12** |
| **SH3PXD2A** | SH3 and PX domains 2A | 25 | **12** |
| **NCK1** | NCK adaptor protein 1 | 134 | **12** |
| **TCF7L2** | transcription factor 7-like 2 (T-cell specific, HMG-box) | 405 | **12** |
| **AGFG1** | ArfGAP with FG repeats 1 | 34 | **12** |
| **MYRIP** | myosin VIIA and Rab interacting protein | 17 | **12** |
| **NBPF3** | neuroblastoma breakpoint family, member 3 | 17 | **12** |
| **RNF115** | ring finger protein 115 | 17 | **12** |
| **RNF135** | ring finger protein 135 | 17 | **12** |
| **TAF3** | TAF3 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 140kDa | 17 | **12** |
| **HNRNPK** | heterogeneous nuclear ribonucleoprotein K | 137 | **12** |
| **DPF2** | D4, zinc and double PHD fingers family 2 | 26 | **12** |
| **MELK** | maternal embryonic leucine zipper kinase | 26 | **12** |
| **GSPT1** | G1 to S phase transition 1 | 35 | **11** |
| **ASPM** | asp (abnormal spindle) homolog, microcephaly associated (Drosophila) | 53 | **11** |
| **GAB2** | GRB2-associated binding protein 2 | 80 | **11** |
| **ASB4** | ankyrin repeat and SOCS box containing 4 | 9 | **11** |

| | | | |
|---|---|---|---|
| **BCDIN3D** | BCDIN3 domain containing | 9 | **11** |
| **CBR4** | carbonyl reductase 4 | 9 | **11** |
| **CCNYL1** | cyclin Y-like 1 | 9 | **11** |
| **COMMD7** | COMM domain containing 7 | 9 | **11** |
| **EXOC3L2** | exocyst complex component 3-like 2 | 9 | **11** |
| **FBXO27** | F-box protein 27 | 9 | **11** |
| **FEM1A** | fem-1 homolog a (C. elegans) | 18 | **11** |
| **GAB3** | GRB2-associated binding protein 3 | 9 | **11** |
| **GIMAP6** | GTPase, IMAP family member 6 | 9 | **11** |
| **GSDMB** | gasdermin B | 27 | **11** |
| **KIF15** | kinesin family member 15 | 9 | **11** |
| **LRCH2** | leucine-rich repeats and calponin homology (CH) domain containing 2 | 9 | **11** |
| **MORC4** | MORC family CW-type zinc finger 4 | 9 | **11** |
| **MRP63** | mitochondrial ribosomal protein 63 | 9 | **11** |
| **PAPSS1** | 3'-phosphoadenosine 5'-phosphosulfate synthase 1 | 27 | **11** |
| **PIK3R4** | phosphoinositide-3-kinase, regulatory subunit 4 | 18 | **11** |
| **RCBTB2** | regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 2 | 9 | **11** |
| **RIT1** | Ras-like without CAAX 1 | 18 | **11** |
| **SCAF11** | SR-related CTD-associated factor 11 | 18 | **11** |
| **SETD4** | SET domain containing 4 | 9 | **11** |
| **SRXN1** | sulfiredoxin 1 | 27 | **11** |
| **SUPT7L** | suppressor of Ty 7 (S. cerevisiae)-like | 18 | **11** |
| **TDRD1** | tudor domain containing 1 | 9 | **11** |
| **TDRD5** | tudor domain containing 5 | 9 | **11** |
| **TET3** | tet oncogene family member 3 | 9 | **11** |
| **TRMT12** | tRNA methyltransferase 12 homolog (S. cerevisiae) | 9 | **11** |
| **URI1** | unknown | 18 | **11** |
| **WDR27** | WD repeat domain 27 | 9 | **11** |
| **YPEL1** | yippee-like 1 (Drosophila) | 9 | **11** |

| | | | |
|---|---|---|---|
| **ZNF135** | zinc finger protein 135 | 9 | **11** |
| **ARF6** | ADP-ribosylation factor 6 | 127 | **11** |
| **MEF2C** | myocyte enhancer factor 2C | 100 | **11** |
| **AMPD1** | adenosine monophosphate deaminase 1 | 73 | **11** |
| **PPP2CB** | protein phosphatase 2, catalytic subunit, beta isozyme | 55 | **11** |
| **RPS6KA2** | ribosomal protein S6 kinase, 90kDa, polypeptide 2 | 46 | **11** |
| **RARA** | retinoic acid receptor, alpha | 286 | **11** |
| **MORF4L2** | mortality factor 4 like 2 | 28 | **11** |
| **TXLNA** | taxilin alpha | 28 | **11** |
| **PLD2** | phospholipase D2 | 103 | **11** |
| **AVEN** | apoptosis, caspase activation inhibitor | 19 | **11** |
| **CREB3L2** | cAMP responsive element binding protein 3-like 2 | 19 | **11** |
| **IKBKAP** | inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein | 57 | **11** |
| **NID2** | nidogen 2 (osteonidogen) | 19 | **11** |
| **TBX5** | T-box 5 | 57 | **11** |
| **RPL26** | ribosomal protein L26 | 29 | **10** |
| **GSTO1** | glutathione S-transferase omega 1 | 78 | **10** |
| **OGT** | O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase) | 79 | **10** |
| **AHRR** | aryl-hydrocarbon receptor repressor | 40 | **10** |
| **AMMECR1** | Alport syndrome, mental retardation, midface hypoplasia and elliptocytosis chromosomal region gene 1 | 10 | **10** |
| **ATPBD4** | ATP binding domain 4 | 10 | **10** |
| **C22orf28** | chromosome 22 open reading frame 28 | 20 | **10** |
| **CEP112** | centrosomal protein 112kDa | 10 | **10** |
| **CWF19L1** | CWF19-like 1, cell cycle control (S. pombe) | 10 | **10** |
| **DESI1** | unknown | 10 | **10** |
| **DNAJC28** | DnaJ (Hsp40) homolog, subfamily C, member 28 | 10 | **10** |
| **HCG9** | HLA complex group 9 (non-protein coding) | 10 | **10** |
| **HINT3** | histidine triad nucleotide binding protein 3 | 10 | **10** |

| | | | |
|---|---|---|---|
| **HIST1H4C** | histone cluster 1, H4c | 20 | **10** |
| **HSBP1** | heat shock factor binding protein 1 | 10 | **10** |
| **HSCB** | HscB iron-sulfur cluster co-chaperone homolog (E. coli) | 10 | **10** |
| **KLHDC8B** | kelch domain containing 8B | 10 | **10** |
| **KLHL4** | kelch-like 4 (Drosophila) | 10 | **10** |
| **KPNA2** | karyopherin alpha 2 (RAG cohort 1, importin alpha 1) | 170 | **10** |
| **LIN52** | lin-52 homolog (C. elegans) | 10 | **10** |
| **MED10** | mediator complex subunit 10 | 20 | **10** |
| **NAIF1** | nuclear apoptosis inducing factor 1 | 10 | **10** |
| **PHACTR4** | phosphatase and actin regulator 4 | 10 | **10** |
| **RAP1GAP2** | RAP1 GTPase activating protein 2 | 10 | **10** |
| **REM2** | RAS (RAD and GEM)-like GTP binding 2 | 10 | **10** |
| **RGS7** | regulator of G-protein signaling 7 | 30 | **10** |
| **RPL36AL** | ribosomal protein L36a-like | 10 | **10** |
| **SNRPE** | small nuclear ribonucleoprotein polypeptide E | 60 | **10** |
| **THAP5** | THAP domain containing 5 | 10 | **10** |
| **TIPRL** | TIP41, TOR signaling pathway regulator-like (S. cerevisiae) | 10 | **10** |
| **UQCRH** | ubiquinol-cytochrome c reductase hinge protein | 10 | **10** |
| **ZNF155** | zinc finger protein 155 | 10 | **10** |
| **NID1** | nidogen 1 | 41 | **10** |
| **FNTB** | farnesyltransferase, CAAX box, beta | 31 | **10** |
| **ITSN2** | intersectin 2 | 31 | **10** |
| **PUM1** | pumilio homolog 1 (Drosophila) | 31 | **10** |
| **SMC4** | structural maintenance of chromosomes 4 | 31 | **10** |
| **ACTN2** | actinin, alpha 2 | 83 | **10** |
| **MX2** | myxovirus (influenza virus) resistance 2 (mouse) | 21 | **10** |
| **NAV2** | neuron navigator 2 | 21 | **10** |
| **NDUFV3** | NADH dehydrogenase (ubiquinone) flavoprotein 3, 10kDa | 21 | **10** |
| **POLG2** | polymerase (DNA directed), gamma 2, accessory subunit | 21 | **10** |

| | | | |
|---|---|---|---|
| **SYCP3** | synaptonemal complex protein 3 | 21 | **10** |
| **UFD1L** | ubiquitin fusion degradation 1 like (yeast) | 42 | **10** |
| **UTP6** | UTP6, small subunit (SSU) processome component, homolog (yeast) | 21 | **10** |
| **ANAPC11** | anaphase promoting complex subunit 11 | 32 | **9** |
| **CSTB** | cystatin B (stefin B) | 64 | **9** |
| **PDS5B** | PDS5, regulator of cohesion maintenance, homolog B (S. cerevisiae) | 32 | **9** |
| **SH3GL3** | SH3-domain GRB2-like 3 | 32 | **9** |
| **STIL** | SCL/TAL1 interrupting locus | 32 | **9** |
| **XRCC2** | X-ray repair complementing defective repair in Chinese hamster cells 2 | 96 | **9** |
| **BCR** | breakpoint cluster region | 267 | **9** |
| **ARAF** | v-raf murine sarcoma 3611 viral oncogene homolog | 43 | **9** |
| **THAP1** | THAP domain containing, apoptosis associated protein 1 | 43 | **9** |
| **PDCD6IP** | programmed cell death 6 interacting protein | 108 | **9** |
| **ACLY** | ATP citrate lyase | 44 | **9** |
| **ANKRD6** | ankyrin repeat domain 6 | 11 | **9** |
| **ARHGAP10** | Rho GTPase activating protein 10 | 11 | **9** |
| **ASCC3** | activating signal cointegrator 1 complex subunit 3 | 22 | **9** |
| **BCORL1** | BCL6 corepressor-like 1 | 11 | **9** |
| **BYSL** | bystin-like | 22 | **9** |
| **C1orf52** | chromosome 1 open reading frame 52 | 11 | **9** |
| **CAPN5** | calpain 5 | 22 | **9** |
| **COL13A1** | collagen, type XIII, alpha 1 | 22 | **9** |
| **DCTN6** | dynactin 6 | 11 | **9** |
| **ERN2** | endoplasmic reticulum to nucleus signaling 2 | 11 | **9** |
| **FILIP1** | filamin A interacting protein 1 | 11 | **9** |
| **FRAT2** | frequently rearranged in advanced T-cell lymphomas 2 | 11 | **9** |
| **IPP** | intracisternal A particle-promoted polypeptide | 11 | **9** |
| **LIMS2** | LIM and senescent cell antigen-like domains 2 | 11 | **9** |
| **MTRF1** | mitochondrial translational release factor 1 | 11 | **9** |

| | | | |
|---|---|---|---|
| **NAB1** | NGFI-A binding protein 1 (EGR1 binding protein 1) | 22 | **9** |
| **NAP1L5** | nucleosome assembly protein 1-like 5 | 11 | **9** |
| **NAV1** | neuron navigator 1 | 11 | **9** |
| **NKD1** | naked cuticle homolog 1 (Drosophila) | 11 | **9** |
| **OPTN** | optineurin | 110 | **9** |
| **PELI1** | pellino homolog 1 (Drosophila) | 22 | **9** |
| **RBMS3** | RNA binding motif, single stranded interacting protein 3 | 11 | **9** |
| **RRAGB** | Ras-related GTP binding B | 11 | **9** |
| **TICAM2** | toll-like receptor adaptor molecule 2 | 22 | **9** |
| **USP35** | ubiquitin specific peptidase 35 | 11 | **9** |
| **WDR35** | WD repeat domain 35 | 11 | **9** |
| **XPO1** | exportin 1 (CRM1 homolog, yeast) | 198 | **9** |
| **ZNF133** | zinc finger protein 133 | 11 | **9** |
| **RAD52** | RAD52 homolog (S. cerevisiae) | 79 | **9** |
| **RPL35A** | ribosomal protein L35a | 34 | **9** |
| **EIF2S1** | eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa | 103 | **9** |
| **CHKB** | choline kinase beta | 23 | **9** |
| **CTR9** | Ctr9, Paf1/RNA polymerase II complex component, homolog (S. cerevisiae) | 23 | **9** |
| **FGF12** | fibroblast growth factor 12 | 23 | **9** |
| **NPAS3** | neuronal PAS domain protein 3 | 23 | **9** |
| **CAMK2B** | calcium/calmodulin-dependent protein kinase II beta | 70 | **9** |
| **SNRPG** | small nuclear ribonucleoprotein polypeptide G | 35 | **9** |
| **PSMC5** | proteasome (prosome, macropain) 26S subunit, ATPase, 5 | 106 | **8** |
| **C17orf49** | chromosome 17 open reading frame 49 | 12 | **8** |
| **C1orf31** | chromosome 1 open reading frame 31 | 12 | **8** |
| **C2CD4B** | C2 calcium-dependent domain containing 4B | 12 | **8** |
| **CDC42SE2** | CDC42 small effector 2 | 12 | **8** |
| **CELF3** | CUGBP, Elav-like family member 3 | 12 | **8** |
| **DHX33** | DEAH (Asp-Glu-Ala-His) box polypeptide 33 | 12 | **8** |

| | | | |
|---|---|---|---|
| **EAF1** | ELL associated factor 1 | 12 | **8** |
| **FAM126A** | family with sequence similarity 126, member A | 12 | **8** |
| **HOXB3** | homeobox B3 | 24 | **8** |
| **KHDRBS2** | KH domain containing, RNA binding, signal transduction associated 2 | 12 | **8** |
| **KIF3B** | kinesin family member 3B | 24 | **8** |
| **MAD2L1BP** | MAD2L1 binding protein | 24 | **8** |
| **MYO9A** | myosin IXA | 12 | **8** |
| **NUSAP1** | nucleolar and spindle associated protein 1 | 12 | **8** |
| **OSTF1** | osteoclast stimulating factor 1 | 24 | **8** |
| **PACS2** | phosphofurin acidic cluster sorting protein 2 | 12 | **8** |
| **PAPOLA** | poly(A) polymerase alpha | 24 | **8** |
| **SNX27** | sorting nexin family member 27 | 24 | **8** |
| **SSH2** | slingshot homolog 2 (Drosophila) | 12 | **8** |
| **TFDP2** | transcription factor Dp-2 (E2F dimerization partner 2) | 24 | **8** |
| **UFC1** | ubiquitin-fold modifier conjugating enzyme 1 | 12 | **8** |
| **CAMK1D** | calcium/calmodulin-dependent protein kinase ID | 37 | **8** |
| **PTBP2** | polypyrimidine tract binding protein 2 | 37 | **8** |
| **ATP5L** | ATP synthase, H+ transporting, mitochondrial Fo complex, subunit G | 25 | **8** |
| **CRCP** | CGRP receptor component | 25 | **8** |
| **SGPL1** | sphingosine-1-phosphate lyase 1 | 25 | **8** |
| **TAF1A** | TATA box binding protein (TBP)-associated factor, RNA polymerase I, A, 48kDa | 25 | **8** |
| **TLE3** | transducin-like enhancer of split 3 (E(sp1) homolog, Drosophila) | 25 | **8** |
| **ZC3HAV1** | zinc finger CCCH-type, antiviral 1 | 25 | **8** |
| **FKBP5** | FK506 binding protein 5 | 101 | **8** |
| **CLSPN** | claspin | 51 | **8** |
| **TBP** | TATA box binding protein | 284 | **8** |
| **AKAP17A** | A kinase (PRKA) anchor protein 17A | 13 | **8** |
| **ANKS1B** | ankyrin repeat and sterile alpha motif domain containing 1B | 26 | **8** |
| **C16orf62** | chromosome 16 open reading frame 62 | 13 | **8** |

| | | | |
|---|---|---|---|
| **C21orf7** | chromosome 21 open reading frame 7 | 13 | **8** |
| **CEP290** | centrosomal protein 290kDa | 52 | **8** |
| **DCTN5** | dynactin 5 (p25) | 13 | **8** |
| **DHRS4L2** | dehydrogenase/reductase (SDR family) member 4 like 2 | 13 | **8** |
| **DTX3L** | deltex 3-like (Drosophila) | 13 | **8** |
| **EIF2C3** | eukaryotic translation initiation factor 2C, 3 | 13 | **8** |
| **FAM96B** | family with sequence similarity 96, member B | 13 | **8** |
| **HSPB11** | heat shock protein family B (small), member 11 | 13 | **8** |
| **KIF18A** | kinesin family member 18A | 26 | **8** |
| **KLHL22** | kelch-like 22 (Drosophila) | 13 | **8** |
| **NPEPPS** | aminopeptidase puromycin sensitive | 26 | **8** |
| **PEAK1** | NKF3 kinase family member | 13 | **8** |
| **PRICKLE2** | prickle homolog 2 (Drosophila) | 13 | **8** |
| **SNAPC1** | small nuclear RNA activating complex, polypeptide 1, 43kDa | 13 | **8** |
| **SNW1** | SNW domain containing 1 | 52 | **8** |
| **USP13** | ubiquitin specific peptidase 13 (isopeptidase T-3) | 26 | **8** |
| **UBE2L3** | ubiquitin-conjugating enzyme E2L 3 | 79 | **8** |
| **NAIP** | NLR family, apoptosis inhibitory protein | 40 | **8** |
| **ARID2** | AT rich interactive domain 2 (ARID, RFX-like) | 27 | **7** |
| **PHPT1** | phosphohistidine phosphatase 1 | 27 | **7** |
| **QKI** | quaking homolog, KH domain RNA binding (mouse) | 41 | **7** |
| **SULT1E1** | sulfotransferase family 1E, estrogen-preferring, member 1 | 55 | **7** |
| **UBA52** | ubiquitin A-52 residue ribosomal protein fusion product 1 | 55 | **7** |
| **APOBEC3D** | apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3D | 14 | **7** |
| **ARHGAP31** | Rho GTPase activating protein 31 | 14 | **7** |
| **COG6** | component of oligomeric golgi complex 6 | 14 | **7** |
| **ESRRB** | estrogen-related receptor beta | 28 | **7** |
| **GMPS** | guanine monphosphate synthetase | 28 | **7** |
| **HP1BP3** | heterochromatin protein 1, binding protein 3 | 14 | **7** |

| | | | |
|---|---|---|---|
| **KIF20B** | kinesin family member 20B | 14 | **7** |
| **LANCL1** | LanC lantibiotic synthetase component C-like 1 (bacterial) | 14 | **7** |
| **MED17** | mediator complex subunit 17 | 42 | **7** |
| **MRPL40** | mitochondrial ribosomal protein L40 | 14 | **7** |
| **MSL2** | male-specific lethal 2 homolog (Drosophila) | 14 | **7** |
| **NAF1** | nuclear assembly factor 1 homolog (S. cerevisiae) | 14 | **7** |
| **NEK3** | NIMA (never in mitosis gene a)-related kinase 3 | 14 | **7** |
| **NEK9** | NIMA (never in mitosis gene a)- related kinase 9 | 28 | **7** |
| **NT5C2** | 5'-nucleotidase, cytosolic II | 28 | **7** |
| **PDZD11** | PDZ domain containing 11 | 14 | **7** |
| **PIWIL4** | piwi-like 4 (Drosophila) | 14 | **7** |
| **TCF12** | transcription factor 12 | 42 | **7** |
| **TIMM8B** | translocase of inner mitochondrial membrane 8 homolog B (yeast) | 14 | **7** |
| **TNNC2** | troponin C type 2 (fast) | 14 | **7** |
| **XRN2** | 5'-3' exoribonuclease 2 | 28 | **7** |
| **ZNF219** | zinc finger protein 219 | 14 | **7** |
| **ZNF366** | zinc finger protein 366 | 14 | **7** |
| **NCOR1** | nuclear receptor corepressor 1 | 211 | **7** |
| **BCL11A** | B-cell CLL/lymphoma 11A (zinc finger protein) | 57 | **7** |
| **SSBP1** | single-stranded DNA binding protein 1 | 43 | **7** |
| **CBX5** | chromobox homolog 5 | 116 | **7** |
| **CIAPIN1** | cytokine induced apoptosis inhibitor 1 | 29 | **7** |
| **LSS** | lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase) | 29 | **7** |
| **SMARCAL1** | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a-like 1 | 29 | **7** |
| **TBL1XR1** | transducin (beta)-like 1 X-linked receptor 1 | 29 | **7** |
| **BTBD10** | BTB (POZ) domain containing 10 | 15 | **7** |
| **CHD7** | chromodomain helicase DNA binding protein 7 | 60 | **7** |
| **HIP1** | huntingtin interacting protein 1 | 45 | **7** |
| **KIAA1598** | KIAA1598 | 15 | **7** |

| | | | |
|---|---|---|---|
| **LSG1** | large subunit GTPase 1 homolog (S. cerevisiae) | 15 | **7** |
| **MID2** | midline 2 | 15 | **7** |
| **MRPL48** | mitochondrial ribosomal protein L48 | 15 | **7** |
| **MYL12A** | myosin, light chain 12A, regulatory, non-sarcomeric | 15 | **7** |
| **MYO1D** | myosin ID | 15 | **7** |
| **PHF8** | PHD finger protein 8 | 30 | **7** |
| **PSME1** | proteasome (prosome, macropain) activator subunit 1 (PA28 alpha) | 60 | **7** |
| **RNF38** | ring finger protein 38 | 15 | **7** |
| **RPL30** | ribosomal protein L30 | 30 | **7** |
| **S100A16** | S100 calcium binding protein A16 | 15 | **7** |
| **SDCBP2** | syndecan binding protein (syntenin) 2 | 15 | **7** |
| **SH3BP2** | SH3-domain binding protein 2 | 45 | **7** |
| **SSPO** | SCO-spondin homolog (Bos taurus) | 15 | **7** |
| **USP42** | ubiquitin specific peptidase 42 | 15 | **7** |
| **CDC123** | cell division cycle 123 homolog (S. cerevisiae) | 46 | **7** |
| **PKP2** | plakophilin 2 | 46 | **7** |
| **PREP** | prolyl endopeptidase | 46 | **7** |
| **EXO1** | exonuclease 1 | 78 | **6** |
| **GEMIN2** | gem (nuclear organelle) associated protein 2 | 47 | **6** |
| **SRSF6** | serine/arginine-rich splicing factor 6 | 47 | **6** |
| **PAX6** | paired box 6 | 189 | **6** |
| **AP3B2** | adaptor-related protein complex 3, beta 2 subunit | 16 | **6** |
| **C7orf10** | chromosome 7 open reading frame 10 | 16 | **6** |
| **CFDP1** | craniofacial development protein 1 | 16 | **6** |
| **CPSF3** | cleavage and polyadenylation specific factor 3, 73kDa | 32 | **6** |
| **DLX6** | distal-less homeobox 6 | 16 | **6** |
| **EXOC8** | exocyst complex component 8 | 16 | **6** |
| **FOXJ2** | forkhead box J2 | 16 | **6** |
| **GEMIN7** | gem (nuclear organelle) associated protein 7 | 16 | **6** |

| | | | |
|---|---|---|---|
| **LANCL2** | LanC lantibiotic synthetase component C-like 2 (bacterial) | 16 | **6** |
| **NIN** | ninein (GSK3B interacting protein) | 32 | **6** |
| **PCM1** | pericentriolar material 1 | 64 | **6** |
| **PSIP1** | PC4 and SFRS1 interacting protein 1 | 96 | **6** |
| **PTPN9** | protein tyrosine phosphatase, non-receptor type 9 | 16 | **6** |
| **SEC14L1** | SEC14-like 1 (S. cerevisiae) | 16 | **6** |
| **THTPA** | thiamine triphosphatase | 16 | **6** |
| **TRIM22** | tripartite motif containing 22 | 32 | **6** |
| **VPS33A** | vacuolar protein sorting 33 homolog A (S. cerevisiae) | 16 | **6** |
| **ZBTB40** | zinc finger and BTB domain containing 40 | 16 | **6** |
| **ZC3H14** | zinc finger CCCH-type containing 14 | 16 | **6** |
| **ZNF644** | zinc finger protein 644 | 16 | **6** |
| **DCLK1** | doublecortin-like kinase 1 | 33 | **6** |
| **FGD1** | FYVE, RhoGEF and PH domain containing 1 | 33 | **6** |
| **IFRD1** | interferon-related developmental regulator 1 | 33 | **6** |
| **PSMA6** | proteasome (prosome, macropain) subunit, alpha type, 6 | 84 | **6** |
| **ADAMTSL3** | ADAMTS-like 3 | 17 | **6** |
| **ADNP** | activity-dependent neuroprotector homeobox | 17 | **6** |
| **ADSS** | adenylosuccinate synthase | 17 | **6** |
| **APBB2** | amyloid beta (A4) precursor protein-binding, family B, member 2 | 17 | **6** |
| **CELF4** | CUGBP, Elav-like family member 4 | 17 | **6** |
| **CENPE** | centromere protein E, 312kDa | 51 | **6** |
| **CENPI** | centromere protein I | 17 | **6** |
| **EIF2S3** | eukaryotic translation initiation factor 2, subunit 3 gamma, 52kDa | 34 | **6** |
| **HNRPLL** | heterogeneous nuclear ribonucleoprotein L-like | 17 | **6** |
| **MFAP1** | microfibrillar-associated protein 1 | 17 | **6** |
| **NUDT11** | nudix (nucleoside diphosphate linked moiety X)-type motif 11 | 17 | **6** |
| **POF1B** | premature ovarian failure, 1B | 17 | **6** |
| **RNF4** | ring finger protein 4 | 34 | **6** |

| | | | |
|---|---|---|---|
| **TUBGCP4** | tubulin, gamma complex associated protein 4 | 17 | **6** |
| **MDC1** | mediator of DNA-damage checkpoint 1 | 86 | **6** |
| **SF3B1** | splicing factor 3b, subunit 1, 155kDa | 69 | **6** |
| **F8** | coagulation factor VIII, procoagulant component | 415 | **6** |
| **RAD51D** | RAD51 homolog D (S. cerevisiae) | 35 | **6** |
| **SIX3** | SIX homeobox 3 | 35 | **6** |
| **C14orf166** | chromosome 14 open reading frame 166 | 18 | **6** |
| **CHMP3** | unknown | 36 | **6** |
| **ECD** | ecdysoneless homolog (Drosophila) | 18 | **6** |
| **EVI5** | ecotropic viral integration site 5 | 18 | **6** |
| **EXOC1** | exocyst complex component 1 | 18 | **6** |
| **HMCN1** | hemicentin 1 | 18 | **6** |
| **LARP1** | La ribonucleoprotein domain family, member 1 | 18 | **6** |
| **MYL3** | myosin, light chain 3, alkali; ventricular, skeletal, slow | 36 | **6** |
| **NR1D2** | nuclear receptor subfamily 1, group D, member 2 | 18 | **6** |
| **PRKAR2A** | protein kinase, cAMP-dependent, regulatory, type II, alpha | 90 | **6** |
| **RANBP1** | RAN binding protein 1 | 36 | **6** |
| **SACS** | spastic ataxia of Charlevoix-Saguenay (sacsin) | 36 | **6** |
| **SYNRG** | synergin, gamma | 18 | **6** |
| **NLRP3** | NLR family, pyrin domain containing 3 | 146 | **5** |
| **BANF1** | barrier to autointegration factor 1 | 55 | **5** |
| **ACTR1A** | ARP1 actin-related protein 1 homolog A, centractin alpha (yeast) | 37 | **5** |
| **ATOX1** | ATX1 antioxidant protein 1 homolog (yeast) | 37 | **5** |
| **GTF2IRD1** | GTF2I repeat domain containing 1 | 37 | **5** |
| **PSMA7** | proteasome (prosome, macropain) subunit, alpha type, 7 | 74 | **5** |
| **SEPT2** | septin 2 | 56 | **5** |
| **ARPC5** | actin related protein 2/3 complex, subunit 5, 16kDa | 19 | **5** |
| **CHD6** | chromodomain helicase DNA binding protein 6 | 19 | **5** |
| **COX6B1** | cytochrome c oxidase subunit VIb polypeptide 1 (ubiquitous) | 19 | **5** |

| | | | |
|---|---|---|---|
| **DCLRE1B** | DNA cross-link repair 1B | 19 | **5** |
| **DHX58** | DEXH (Asp-Glu-X-His) box polypeptide 58 | 19 | **5** |
| **FANCI** | Fanconi anemia, complementation group I | 38 | **5** |
| **HEATR1** | HEAT repeat containing 1 | 19 | **5** |
| **LUC7L** | LUC7-like (S. cerevisiae) | 19 | **5** |
| **MED31** | mediator complex subunit 31 | 19 | **5** |
| **RGS20** | regulator of G-protein signaling 20 | 19 | **5** |
| **SH3RF1** | SH3 domain containing ring finger 1 | 19 | **5** |
| **TNNI1** | troponin I type 1 (skeletal, slow) | 38 | **5** |
| **UBAC1** | UBA domain containing 1 | 19 | **5** |
| **CAND1** | cullin-associated and neddylation-dissociated 1 | 39 | **5** |
| **EIF4B** | eukaryotic translation initiation factor 4B | 39 | **5** |
| **TBC1D4** | TBC1 domain family, member 4 | 39 | **5** |
| **ARPC1A** | actin related protein 2/3 complex, subunit 1A, 41kDa | 20 | **5** |
| **ATP5I** | ATP synthase, H+ transporting, mitochondrial Fo complex, subunit E | 20 | **5** |
| **DIAPH2** | diaphanous homolog 2 (Drosophila) | 20 | **5** |
| **FANCL** | Fanconi anemia, complementation group L | 40 | **5** |
| **MTMR6** | myotubularin related protein 6 | 20 | **5** |
| **MUS81** | MUS81 endonuclease homolog (S. cerevisiae) | 40 | **5** |
| **NEK1** | NIMA (never in mitosis gene a)-related kinase 1 | 20 | **5** |
| **RAB31** | RAB31, member RAS oncogene family | 20 | **5** |
| **RPL38** | ribosomal protein L38 | 20 | **5** |
| **SATB2** | SATB homeobox 2 | 20 | **5** |
| **SGOL2** | shugoshin-like 2 (S. pombe) | 20 | **5** |
| **SPRR1B** | small proline-rich protein 1B | 20 | **5** |
| **TTBK2** | tau tubulin kinase 2 | 20 | **5** |
| **UBA6** | ubiquitin-like modifier activating enzyme 6 | 20 | **5** |
| **PPP1R8** | protein phosphatase 1, regulatory (inhibitor) subunit 8 | 41 | **5** |
| **PCBP1** | poly(rC) binding protein 1 | 62 | **5** |

| | | | |
|---|---|---|---|
| **CRX** | cone-rod homeobox | 42 | **5** |
| **CYP21A1P** | cytochrome P450, family 21, subfamily A, polypeptide 1 pseudogene | 21 | **5** |
| **IPO13** | importin 13 | 21 | **5** |
| **KLF3** | Kruppel-like factor 3 (basic) | 21 | **5** |
| **PFDN2** | prefoldin subunit 2 | 21 | **5** |
| **POLM** | polymerase (DNA directed), mu | 21 | **5** |
| **PRPF40A** | PRP40 pre-mRNA processing factor 40 homolog A (S. cerevisiae) | 42 | **5** |
| **RAB13** | RAB13, member RAS oncogene family | 21 | **5** |
| **SBF2** | SET binding factor 2 | 21 | **5** |
| **TBX19** | T-box 19 | 21 | **5** |
| **MEFV** | Mediterranean fever | 234 | **5** |
| **KIF23** | kinesin family member 23 | 43 | **5** |
| **EDC3** | enhancer of mRNA decapping 3 homolog (S. cerevisiae) | 22 | **5** |
| **ERH** | enhancer of rudimentary homolog (Drosophila) | 22 | **5** |
| **INTS3** | integrator complex subunit 3 | 22 | **5** |
| **NCAPD3** | non-SMC condensin II complex, subunit D3 | 22 | **5** |
| **NUP98** | nucleoporin 98kDa | 110 | **5** |
| **RAP1GDS1** | RAP1, GTP-GDP dissociation stimulator 1 | 22 | **5** |
| **SPTLC2** | serine palmitoyltransferase, long chain base subunit 2 | 22 | **5** |
| **SYTL4** | synaptotagmin-like 4 | 22 | **5** |
| **ZC3HC1** | zinc finger, C3HC-type containing 1 | 22 | **5** |
| **COPZ1** | coatomer protein complex, subunit zeta 1 | 23 | **4** |
| **LIN7C** | lin-7 homolog C (C. elegans) | 23 | **4** |
| **SARNP** | SAP domain containing ribonucleoprotein | 23 | **4** |
| **SBDS** | Shwachman-Bodian-Diamond syndrome | 46 | **4** |
| **SEPT8** | septin 8 | 23 | **4** |
| **UBE3C** | ubiquitin protein ligase E3C | 23 | **4** |
| **INCENP** | inner centromere protein antigens 135/155kDa | 47 | **4** |
| **COG5** | component of oligomeric golgi complex 5 | 24 | **4** |

| | | | |
|---|---|---|---|
| **CYFIP1** | cytoplasmic FMR1 interacting protein 1 | 24 | **4** |
| **TNRC6B** | trinucleotide repeat containing 6B | 24 | **4** |
| **PSME2** | proteasome (prosome, macropain) activator subunit 2 (PA28 beta) | 49 | **4** |
| **PCBP2** | poly(rC) binding protein 2 | 74 | **4** |
| **AP3M1** | adaptor-related protein complex 3, mu 1 subunit | 25 | **4** |
| **ARL6** | ADP-ribosylation factor-like 6 | 25 | **4** |
| **CDKL5** | cyclin-dependent kinase-like 5 | 50 | **4** |
| **MTPAP** | mitochondrial poly(A) polymerase | 25 | **4** |
| **NUP54** | nucleoporin 54kDa | 25 | **4** |
| **PGD** | phosphogluconate dehydrogenase | 25 | **4** |
| **PRICKLE1** | prickle homolog 1 (Drosophila) | 25 | **4** |
| **STX11** | syntaxin 11 | 25 | **4** |
| **XPNPEP1** | X-prolyl aminopeptidase (aminopeptidase P) 1, soluble | 25 | **4** |
| **ZBTB38** | zinc finger and BTB domain containing 38 | 25 | **4** |
| **SUMO4** | SMT3 suppressor of mif two 3 homolog 4 (S. cerevisiae) | 51 | **4** |
| **GNPDA2** | glucosamine-6-phosphate deaminase 2 | 26 | **4** |
| **PRIM2** | primase, DNA, polypeptide 2 (58kDa) | 26 | **4** |
| **PSMA3** | proteasome (prosome, macropain) subunit, alpha type, 3 | 78 | **4** |
| **PSMC1** | proteasome (prosome, macropain) 26S subunit, ATPase, 1 | 78 | **4** |
| **EED** | embryonic ectoderm development | 53 | **4** |
| **EIF4G3** | eukaryotic translation initiation factor 4 gamma, 3 | 27 | **4** |
| **KCNAB1** | potassium voltage-gated channel, shaker-related subfamily, beta member 1 | 27 | **4** |
| **MTMR2** | myotubularin related protein 2 | 27 | **4** |
| **NUCKS1** | nuclear casein kinase and cyclin-dependent kinase substrate 1 | 27 | **4** |
| **RPL35** | ribosomal protein L35 | 27 | **4** |
| **SKAP2** | src kinase associated phosphoprotein 2 | 27 | **4** |
| **SUGT1** | SGT1, suppressor of G2 allele of SKP1 (S. cerevisiae) | 27 | **4** |
| **APOBEC3B** | apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3B | 28 | **4** |
| **RBFOX2** | RNA binding protein, fox-1 homolog (C. elegans) 2 | 28 | **4** |

| | | | |
|---|---|---|---|
| **RPS6KA4** | ribosomal protein S6 kinase, 90kDa, polypeptide 4 | 28 | **4** |
| **RUNX1T1** | runt-related transcription factor 1; translocated to, 1 (cyclin D-related) | 113 | **4** |
| **ALDH18A1** | aldehyde dehydrogenase 18 family, member A1 | 29 | **3** |
| **NUTF2** | nuclear transport factor 2 | 29 | **3** |
| **PDC** | phosducin | 29 | **3** |
| **PSMB7** | proteasome (prosome, macropain) subunit, beta type, 7 | 59 | **3** |
| **RELN** | reelin | 120 | **3** |
| **EPB41L2** | erythrocyte membrane protein band 4.1-like 2 | 31 | **3** |
| **PEX7** | peroxisomal biogenesis factor 7 | 31 | **3** |
| **PRDM16** | PR domain containing 16 | 31 | **3** |
| **USP1** | ubiquitin specific peptidase 1 | 31 | **3** |
| **ACTR3** | ARP3 actin-related protein 3 homolog (yeast) | 64 | **3** |
| **FKBP1A** | FK506 binding protein 1A, 12kDa | 96 | **3** |
| **BPTF** | bromodomain PHD finger transcription factor | 33 | **3** |
| **H3F3A** | H3 histone, family 3A | 66 | **3** |
| **HESX1** | HESX homeobox 1 | 33 | **3** |
| **PPP3CC** | protein phosphatase 3, catalytic subunit, gamma isozyme | 33 | **3** |
| **UNG** | uracil-DNA glycosylase | 101 | **3** |
| **SEC31A** | SEC31 homolog A (S. cerevisiae) | 34 | **3** |
| **IMMT** | inner membrane protein, mitochondrial | 35 | **3** |
| **MED21** | mediator complex subunit 21 | 35 | **3** |
| **UBA2** | ubiquitin-like modifier activating enzyme 2 | 35 | **3** |
| **HNRNPH3** | heterogeneous nuclear ribonucleoprotein H3 (2H9) | 36 | **3** |
| **SON** | SON DNA binding protein | 36 | **3** |
| **TROVE2** | TROVE domain family, member 2 | 36 | **3** |
| **GOPC** | golgi-associated PDZ and coiled-coil motif containing | 37 | **3** |
| **TNPO1** | transportin 1 | 75 | **3** |
| **EIF2B2** | eukaryotic translation initiation factor 2B, subunit 2 beta, 39kDa | 38 | **3** |
| **POLI** | polymerase (DNA directed) iota | 76 | **3** |

| | | | |
|---|---|---|---|
| **CENPJ** | centromere protein J | 39 | **3** |
| **TRAPPC2** | trafficking protein particle complex 2 | 39 | **3** |
| **HSF2** | heat shock transcription factor 2 | 40 | **3** |
| **KCNIP2** | Kv channel interacting protein 2 | 40 | **3** |
| **RAP2A** | RAP2A, member of RAS oncogene family | 40 | **3** |
| **CTDP1** | CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) phosphatase, subunit 1 | 43 | **2** |
| **FXR1** | fragile X mental retardation, autosomal homolog 1 | 43 | **2** |
| **STAM2** | signal transducing adaptor molecule (SH3 domain and ITAM motif) 2 | 43 | **2** |
| **AKAP5** | A kinase (PRKA) anchor protein 5 | 45 | **2** |
| **LCP2** | lymphocyte cytosolic protein 2 (SH2 domain containing leukocyte protein of 76kDa) | 91 | **2** |
| **FANCE** | Fanconi anemia, complementation group E | 46 | **2** |
| **RPA3** | replication protein A3, 14kDa | 46 | **2** |
| **PSMB3** | proteasome (prosome, macropain) subunit, beta type, 3 | 49 | **2** |
| **ILF2** | interleukin enhancer binding factor 2, 45kDa | 50 | **2** |
| **TPR** | translocated promoter region (to activated MET oncogene) | 51 | **2** |
| **SNRPD2** | small nuclear ribonucleoprotein D2 polypeptide 16.5kDa | 52 | **2** |
| **NLRP1** | NLR family, pyrin domain containing 1 | 53 | **2** |
| **KPNA5** | karyopherin alpha 5 (importin alpha 6) | 54 | **2** |
| **OCRL** | oculocerebrorenal syndrome of Lowe | 55 | **2** |
| **ACAT1** | acetyl-CoA acetyltransferase 1 | 56 | **2** |
| **DCLRE1C** | DNA cross-link repair 1C | 57 | **2** |
| **SNCAIP** | synuclein, alpha interacting protein | 59 | **2** |
| **KPNA3** | karyopherin alpha 3 (importin alpha 4) | 67 | **1** |
| **SHOX** | short stature homeobox | 70 | **1** |
| **SNCA** | synuclein, alpha (non A4 component of amyloid precursor) | 788 | **1** |
| **POLR2B** | polymerase (RNA) II (DNA directed) polypeptide B, 140kDa | 122 | **1** |
| **C10orf28** | chromosome 10 open reading frame 28 | 0 | **0** |
| **C10orf46** | chromosome 10 open reading frame 46 | 0 | **0** |
| **C17orf107** | chromosome 17 open reading frame 107 | 0 | **0** |

| | | | |
|---|---|---|---|
| **C6orf7** | chromosome 6 open reading frame 7 | 0 | **0** |
| **CCDC72** | coiled-coil domain containing 72 | 0 | **0** |
| **CTAGE11P** | CTAGE family, member 11, pseudogene | 0 | **0** |
| **DPY19L1P1** | dpy-19-like 1 pseudogene 1 (C. elegans) | 0 | **0** |
| **DSERG1** | Down syndrome encephalopathy related protein 1 | 0 | **0** |
| **ENO4** | enolase family member 4 | 0 | **0** |
| **FLJ23865** | hypothetical protein FLJ23865 | 0 | **0** |
| **FLJ23867** | hypothetical protein FLJ23867 | 0 | **0** |
| **FLJ27243** | FLJ27243 protein | 0 | **0** |
| **FLJ41941** | hypothetical LOC100192420 | 0 | **0** |
| **FLJ42102** | hypothetical LOC399923 | 0 | **0** |
| **FLJ43879** | FLJ43879 protein | 0 | **0** |
| **FLJ44313** | FLJ44313 protein | 0 | **0** |
| **FLJ45079** | FLJ45079 protein | 0 | **0** |
| **FLJ45513** | hypothetical LOC729220 | 0 | **0** |
| **FLJ46010** | FLJ46010 protein | 0 | **0** |
| **GSTTP2** | glutathione S-transferase theta pseudogene 2 | 0 | **0** |
| **HCG25** | HLA complex group 25 | 0 | **0** |
| **ITPK1-AS1** | ITPK1 antisense RNA 1 (non-protein coding) | 0 | **0** |
| **LINC00092** | unknown | 0 | **0** |
| **LINC00327** | long intergenic non-protein coding RNA 327 | 0 | **0** |
| **LINC00348** | unknown | 0 | **0** |
| **LINC00426** | unknown | 0 | **0** |
| **LOC100127885** | hypothetical protein LOC100127885 | 0 | **0** |
| **LOC100127910** | hypothetical LOC100127910 | 0 | **0** |
| **LOC100128130** | hypothetical LOC100128130 | 0 | **0** |
| **LOC100128482** | hypothetical LOC100128482 | 0 | **0** |
| **LOC100128508** | PP12100 | 0 | **0** |
| **LOC100130698** | hypothetical LOC100130698 | 0 | **0** |

| | | | |
|---|---|---|---|
| **LOC100131910** | hypothetical LOC100131910 | 0 | **0** |
| **LOC100132272** | hypothetical LOC100132272 | 0 | **0** |
| **LOC100132909** | hypothetical LOC100132909 | 0 | **0** |
| **LOC100133077** | hypothetical LOC100133077 | 0 | **0** |
| **LOC100216001** | hypothetical LOC100216001 | 0 | **0** |
| **LOC100268168** | hypothetical LOC100268168 | 0 | **0** |
| **LOC100286925** | hypothetical LOC100286925 | 0 | **0** |
| **LOC100287413** | hypothetical LOC100287413 | 0 | **0** |
| **LOC100287541** | hypothetical protein LOC100287541 | 0 | **0** |
| **LOC100287813** | hypothetical LOC100287813 | 0 | **0** |
| **LOC100288181** | hypothetical LOC100288181 | 0 | **0** |
| **LOC100288997** | hypothetical LOC100288997 | 0 | **0** |
| **LOC100289019** | hypothetical LOC100289019 | 0 | **0** |
| **LOC100289026** | hypothetical LOC100289026 | 0 | **0** |
| **LOC100292409** | hypothetical LOC100292409 | 0 | **0** |
| **LOC100293044** | hypothetical LOC100293044 | 0 | **0** |
| **LOC100293962** | hypothetical LOC100293962 | 0 | **0** |
| **LOC100294020** | hypothetical LOC100294020 | 0 | **0** |
| **LOC100294033** | protein FAM115A-like | 0 | **0** |
| **LOC100294341** | ADP-ribosylation factor-like protein 17-like | 0 | **0** |
| **LOC100505471** | putative uncharacterized protein encoded by NCRNA00269-like | 0 | **0** |
| **LOC100505481** | hypothetical LOC100505481 | 0 | **0** |
| **LOC100505487** | hypothetical LOC100505487 | 0 | **0** |
| **LOC100505491** | hypothetical LOC100505491 | 0 | **0** |
| **LOC100505492** | hypothetical LOC100505492 | 0 | **0** |
| **LOC100505519** | hypothetical LOC100505519 | 0 | **0** |
| **LOC100505525** | hypothetical LOC100505525 | 0 | **0** |
| **LOC100505528** | hypothetical LOC100505528 | 0 | **0** |
| **LOC100505534** | hypothetical LOC100505534 | 0 | **0** |

| | | | |
|---|---|---|---|
| **LOC100505577** | hypothetical LOC100505577 | 0 | **0** |
| **LOC100505594** | hypothetical LOC100505594 | 0 | **0** |
| **LOC100505634** | hypothetical LOC100505634 | 0 | **0** |
| **LOC100505669** | hypothetical LOC100505669 | 0 | **0** |
| **LOC100505688** | hypothetical LOC100505688 | 0 | **0** |
| **LOC100505711** | hypothetical LOC100505711 | 0 | **0** |
| **LOC100505717** | hypothetical LOC100505717 | 0 | **0** |
| **LOC100505719** | hypothetical LOC100505719 | 0 | **0** |
| **LOC100505734** | hypothetical LOC100505734 | 0 | **0** |
| **LOC100505743** | hypothetical LOC100505743 | 0 | **0** |
| **LOC100505769** | hypothetical LOC100505769 | 0 | **0** |
| **LOC100505792** | hypothetical LOC100505792 | 0 | **0** |
| **LOC100505813** | hypothetical LOC100505813 | 0 | **0** |
| **LOC100505815** | hypothetical LOC100505815 | 0 | **0** |
| **LOC100505829** | hypothetical LOC100505829 | 0 | **0** |
| **LOC100505863** | hypothetical LOC100505863 | 0 | **0** |
| **LOC100505904** | hypothetical LOC100505904 | 0 | **0** |
| **LOC100505937** | hypothetical LOC100505937 | 0 | **0** |
| **LOC100505938** | hypothetical LOC100505938 | 0 | **0** |
| **LOC100505940** | hypothetical LOC100505940 | 0 | **0** |
| **LOC100505971** | hypothetical LOC100505971 | 0 | **0** |
| **LOC100506014** | hypothetical LOC100506014 | 0 | **0** |
| **LOC100506036** | hypothetical LOC100506036 | 0 | **0** |
| **LOC100506075** | hypothetical LOC100506075 | 0 | **0** |
| **LOC100506079** | hypothetical protein LOC100506079 | 0 | **0** |
| **LOC100506126** | hypothetical LOC100506126 | 0 | **0** |
| **LOC100506143** | hypothetical LOC100506143 | 0 | **0** |
| **LOC100506158** | hypothetical LOC100506158 | 0 | **0** |
| **LOC100506162** | hypothetical LOC100506162 | 0 | **0** |

| | | | |
|---|---|---|---|
| **LOC100506201** | hypothetical LOC100506201 | 0 | **0** |
| **LOC100506214** | hypothetical LOC100506214 | 0 | **0** |
| **LOC100506238** | hypothetical LOC100506238 | 0 | **0** |
| **LOC100506241** | uncharacterized protein FLJ39582-like | 0 | **0** |
| **LOC100506284** | hypothetical LOC100506284 | 0 | **0** |
| **LOC100506290** | hypothetical protein LOC100506290 | 0 | **0** |
| **LOC100506291** | hypothetical LOC100506291 | 0 | **0** |
| **LOC100506304** | hypothetical LOC100506304 | 0 | **0** |
| **LOC100506411** | hypothetical LOC100506411 | 0 | **0** |
| **LOC100506455** | hypothetical LOC100506455 | 0 | **0** |
| **LOC100506486** | hypothetical LOC100506486 | 0 | **0** |
| **LOC100506528** | hypothetical LOC100506528 | 0 | **0** |
| **LOC100506543** | hypothetical LOC100506543 | 0 | **0** |
| **LOC100506551** | hypothetical LOC100506551 | 0 | **0** |
| **LOC100506560** | hypothetical LOC100506560 | 0 | **0** |
| **LOC100506578** | uncharacterized protein C12orf71-like | 0 | **0** |
| **LOC100506642** | hypothetical LOC100506642 | 0 | **0** |
| **LOC100506675** | hypothetical LOC100506675 | 0 | **0** |
| **LOC100506691** | hypothetical LOC100506691 | 0 | **0** |
| **LOC100506705** | hypothetical LOC100506705 | 0 | **0** |
| **LOC100506730** | hypothetical LOC100506730 | 0 | **0** |
| **LOC100506731** | hypothetical LOC100506731 | 0 | **0** |
| **LOC100506748** | hypothetical LOC100506748 | 0 | **0** |
| **LOC100506753** | hypothetical LOC100506753 | 0 | **0** |
| **LOC100506762** | hypothetical LOC100506762 | 0 | **0** |
| **LOC100506775** | hypothetical LOC100506775 | 0 | **0** |
| **LOC100506778** | hypothetical LOC100506778 | 0 | **0** |
| **LOC100506792** | hypothetical LOC100506792 | 0 | **0** |
| **LOC100506800** | hypothetical LOC100506800 | 0 | **0** |

| | | | |
|---|---|---|---|
| **LOC100506827** | hypothetical LOC100506827 | 0 | **0** |
| **LOC100506834** | hypothetical LOC100506834 | 0 | **0** |
| **LOC100506855** | hypothetical LOC100506855 | 0 | **0** |
| **LOC100506856** | hypothetical LOC100506856 | 0 | **0** |
| **LOC100506860** | hypothetical LOC100506860 | 0 | **0** |
| **LOC100506906** | unknown | 0 | **0** |
| **LOC100506917** | hypothetical LOC100506917 | 0 | **0** |
| **LOC100506929** | hypothetical LOC100506929 | 0 | **0** |
| **LOC100506948** | hypothetical LOC100506948 | 0 | **0** |
| **LOC100506957** | hypothetical LOC100506957 | 0 | **0** |
| **LOC100506974** | hypothetical LOC100506974 | 0 | **0** |
| **LOC100506980** | hypothetical LOC100506980 | 0 | **0** |
| **LOC100507018** | hypothetical LOC100507018 | 0 | **0** |
| **LOC100507049** | hypothetical LOC100507049 | 0 | **0** |
| **LOC100507054** | hypothetical LOC100507054 | 0 | **0** |
| **LOC100507088** | hypothetical LOC100507088 | 0 | **0** |
| **LOC100507094** | hypothetical LOC100507094 | 0 | **0** |
| **LOC100507106** | hypothetical LOC100507106 | 0 | **0** |
| **LOC100507131** | hypothetical LOC100507131 | 0 | **0** |
| **LOC100507133** | hypothetical LOC100507133 | 0 | **0** |
| **LOC100507149** | hypothetical LOC100507149 | 0 | **0** |
| **LOC100507161** | putative uncharacterized protein NCRNA00269-like | 0 | **0** |
| **LOC100507178** | hypothetical LOC100507178 | 0 | **0** |
| **LOC100507212** | hypothetical LOC100507212 | 0 | **0** |
| **LOC100507228** | hypothetical LOC100507228 | 0 | **0** |
| **LOC100507229** | zinc finger protein ENSP00000375192-like | 0 | **0** |
| **LOC100507241** | hypothetical LOC100507241 | 0 | **0** |
| **LOC100507242** | hypothetical LOC100507242 | 0 | **0** |
| **LOC100507265** | hypothetical LOC100507265 | 0 | **0** |

| | | | |
|---|---|---|---|
| **LOC100507283** | hypothetical LOC100507283 | 0 | **0** |
| **LOC100507286** | hypothetical LOC100507286 | 0 | **0** |
| **LOC100507317** | hypothetical LOC100507317 | 0 | **0** |
| **LOC100507322** | hypothetical LOC100507322 | 0 | **0** |
| **LOC100507360** | hypothetical LOC100507360 | 0 | **0** |
| **LOC100507367** | hypothetical LOC100507367 | 0 | **0** |
| **LOC100507376** | hypothetical LOC100507376 | 0 | **0** |
| **LOC100507395** | hypothetical LOC100507395 | 0 | **0** |
| **LOC100507401** | hypothetical LOC100507401 | 0 | **0** |
| **LOC100507418** | hypothetical LOC100507418 | 0 | **0** |
| **LOC100507447** | hypothetical LOC100507447 | 0 | **0** |
| **LOC100507458** | hypothetical LOC100507458 | 0 | **0** |
| **LOC100507460** | hypothetical LOC100507460 | 0 | **0** |
| **LOC100507473** | hypothetical LOC100507473 | 0 | **0** |
| **LOC100507487** | hypothetical LOC100507487 | 0 | **0** |
| **LOC100507507** | hypothetical LOC100507507 | 0 | **0** |
| **LOC100507552** | hypothetical LOC100507552 | 0 | **0** |
| **LOC100507554** | hypothetical LOC100507554 | 0 | **0** |
| **LOC100507558** | hypothetical LOC100507558 | 0 | **0** |
| **LOC100507559** | hypothetical LOC100507559 | 0 | **0** |
| **LOC100507624** | hypothetical LOC100507624 | 0 | **0** |
| **LOC100507630** | hypothetical LOC100507630 | 0 | **0** |
| **LOC100507669** | hypothetical LOC100507669 | 0 | **0** |
| **LOC100507904** | hypothetical protein LOC100507904 | 0 | **0** |
| **LOC100507930** | hypothetical LOC100507930 | 0 | **0** |
| **LOC100508118** | hypothetical LOC100508118 | 0 | **0** |
| **LOC100508329** | hypothetical LOC100508329 | 0 | **0** |
| **LOC100508384** | hypothetical protein LOC100508384 | 0 | **0** |
| **LOC100508782** | inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 1-like | 0 | **0** |

| | | | |
|---|---|---|---|
| **LOC100508869** | hypothetical LOC100508869 | 0 | **0** |
| **LOC100508939** | hypothetical LOC100508939 | 0 | **0** |
| **LOC100509023** | putative speedy protein-like protein LOC442572-like | 0 | **0** |
| **LOC100509105** | hypothetical LOC100509105 | 0 | **0** |
| **LOC100509213** | hypothetical LOC100509213 | 0 | **0** |
| **LOC100509256** | hypothetical LOC100509256 | 0 | **0** |
| **LOC100509323** | baculoviral IAP repeat-containing protein 1-like | 0 | **0** |
| **LOC100509413** | hypothetical LOC100509413 | 0 | **0** |
| **LOC100509621** | hypothetical LOC100509621 | 0 | **0** |
| **LOC100509926** | hypothetical LOC100509926 | 0 | **0** |
| **LOC100510007** | hypothetical LOC100510007 | 0 | **0** |
| **LOC100510011** | hypothetical LOC100510011 | 0 | **0** |
| **LOC100510017** | hypothetical LOC100510017 | 0 | **0** |
| **LOC100652732** | coiled-coil and C2 domain-containing protein 2A-like | 0 | **0** |
| **LOC100652733** | hypothetical LOC100652733 | 0 | **0** |
| **LOC100652747** | hypothetical LOC100652747 | 0 | **0** |
| **LOC100652764** | hypothetical LOC100652764 | 0 | **0** |
| **LOC100652765** | hypothetical LOC100652765 | 0 | **0** |
| **LOC100652769** | hypothetical protein LOC100652769 | 0 | **0** |
| **LOC100652800** | hypothetical LOC100652800 | 0 | **0** |
| **LOC100652805** | hypothetical LOC100652805 | 0 | **0** |
| **LOC100652822** | hypothetical protein LOC100652822 | 0 | **0** |
| **LOC100652839** | hypothetical LOC100652839 | 0 | **0** |
| **LOC100652843** | hypothetical LOC100652843 | 0 | **0** |
| **LOC100652845** | hypothetical LOC100652845 | 0 | **0** |
| **LOC100652850** | hypothetical LOC100652850 | 0 | **0** |
| **LOC100652858** | hypothetical LOC100652858 | 0 | **0** |
| **LOC100652887** | hypothetical LOC100652887 | 0 | **0** |
| **LOC100652902** | hypothetical LOC100652902 | 0 | **0** |

| | | | |
|---|---|---|---|
| **LOC100652922** | hypothetical protein LOC100652922 | 0 | **0** |
| **LOC100652933** | unknown | 0 | **0** |
| **LOC100652936** | hypothetical LOC100652936 | 0 | **0** |
| **LOC100652950** | hypothetical LOC100652950 | 0 | **0** |
| **LOC100652961** | hypothetical protein LOC100652961 | 0 | **0** |
| **LOC100652964** | hypothetical LOC100652964 | 0 | **0** |
| **LOC100652967** | 6.8 kDa mitochondrial proteolipid-like | 0 | **0** |
| **LOC100652993** | hypothetical LOC100652993 | 0 | **0** |
| **LOC100653003** | hypothetical LOC100653003 | 0 | **0** |
| **LOC100653004** | hypothetical LOC100653004 | 0 | **0** |
| **LOC100653005** | hypothetical LOC100653005 | 0 | **0** |
| **LOC100653021** | hypothetical LOC100653021 | 0 | **0** |
| **LOC100653041** | hypothetical LOC100653041 | 0 | **0** |
| **LOC100653042** | hypothetical LOC100653042 | 0 | **0** |
| **LOC100653060** | putative POM121-like protein 1-like | 0 | **0** |
| **LOC100653061** | beta-glucuronidase-like protein SMA4-like | 0 | **0** |
| **LOC100653064** | hypothetical protein LOC100653064 | 0 | **0** |
| **LOC100653131** | hypothetical LOC100653131 | 0 | **0** |
| **LOC100653179** | hypothetical LOC100653179 | 0 | **0** |
| **LOC100653227** | hypothetical protein LOC100653227 | 0 | **0** |
| **LOC100653236** | hypothetical LOC100653236 | 0 | **0** |
| **LOC100653284** | hypothetical LOC100653284 | 0 | **0** |
| **LOC100653286** | aldo-keto reductase family 1 member C2-like | 0 | **0** |
| **LOC100653320** | hypothetical LOC100653320 | 0 | **0** |
| **LOC100653334** | hypothetical LOC100653334 | 0 | **0** |
| **LOC100885775** | unknown | 0 | **0** |
| **LOC285375** | hypothetical LOC285375 | 0 | **0** |
| **LOC285456** | hypothetical LOC285456 | 0 | **0** |
| **LOC286190** | hypothetical LOC286190 | 0 | **0** |

| | | | |
|---|---|---|---|
| **LOC339400** | hypothetical LOC339400 | 0 | **0** |
| **LOC344887** | NmrA-like family domain containing 1 pseudogene | 0 | **0** |
| **LOC391322** | D-dopachrome tautomerase-like | 0 | **0** |
| **LOC440742** | hypothetical LOC440742 | 0 | **0** |
| **LOC442132** | golgin A6 family-like 1 pseudogene | 0 | **0** |
| **LOC642361** | hypothetical LOC642361 | 0 | **0** |
| **LOC645202** | golgin A6 family-like | 0 | **0** |
| **LOC645513** | hypothetical LOC645513 | 0 | **0** |
| **LOC647012** | YY1 transcription factor pseudogene | 0 | **0** |
| **LOC728034** | hypothetical LOC728034 | 0 | **0** |
| **LOC729313** | peptidyl-prolyl cis-trans isomerase A-like | 0 | **0** |
| **LOC729400** | putative POM121-like protein 1-like | 0 | **0** |
| **LOC730184** | hypothetical LOC730184 | 0 | **0** |
| **LOC732360** | G/T mismatch-specific thymine DNA glycosylase-like | 0 | **0** |
| **NCRNA00118** | non-protein coding RNA 118 | 0 | **0** |
| **ZNF322B** | unknown | 0 | **0** |
| **AAED1** | unknown | 5 | **0** |
| **AASDH** | aminoadipate-semialdehyde dehydrogenase | 6 | **0** |
| **ACAD8** | acyl-CoA dehydrogenase family, member 8 | 13 | **0** |
| **ACOT9** | acyl-CoA thioesterase 9 | 12 | **0** |
| **ACRC** | acidic repeat containing | 4 | **0** |
| **ACYP1** | acylphosphatase 1, erythrocyte (common) type | 12 | **0** |
| **ADAP2** | ArfGAP with dual PH domains 2 | 20 | **0** |
| **ADAT2** | adenosine deaminase, tRNA-specific 2 | 6 | **0** |
| **ADAT3** | adenosine deaminase, tRNA-specific 3 | 3 | **0** |
| **ADCK1** | aarF domain containing kinase 1 | 7 | **0** |
| **ADNP2** | ADNP homeobox 2 | 9 | **0** |
| **AEBP2** | AE binding protein 2 | 9 | **0** |
| **AFAP1** | actin filament associated protein 1 | 15 | **0** |

| | | | |
|---|---|---|---|
| **AGK** | acylglycerol kinase | 25 | **0** |
| **AHDC1** | AT hook, DNA binding motif, containing 1 | 6 | **0** |
| **AK8** | adenylate kinase 8 | 7 | **0** |
| **ALG1L2** | asparagine-linked glycosylation 1-like 2 | 1 | **0** |
| **ALPK3** | alpha-kinase 3 | 6 | **0** |
| **AMN1** | antagonist of mitotic exit network 1 homolog (S. cerevisiae) | 2 | **0** |
| **AMZ2P1** | archaelysin family metallopeptidase 2 pseudogene 1 | 3 | **0** |
| **ANGEL1** | angel homolog 1 (Drosophila) | 6 | **0** |
| **ANKRD13B** | ankyrin repeat domain 13B | 8 | **0** |
| **ANKRD20A2** | ankyrin repeat domain 20 family, member A2 | 2 | **0** |
| **ANKRD26** | ankyrin repeat domain 26 | 12 | **0** |
| **ANKRD36** | ankyrin repeat domain 36 | 9 | **0** |
| **ANKRD36B** | ankyrin repeat domain 36B | 6 | **0** |
| **ANKRD50** | ankyrin repeat domain 50 | 3 | **0** |
| **ANKRD55** | ankyrin repeat domain 55 | 11 | **0** |
| **ANKRD65** | unknown | 3 | **0** |
| **ANXA2P1** | annexin A2 pseudogene 1 | 2 | **0** |
| **AOX2P** | aldehyde oxidase 2 pseudogene | 5 | **0** |
| **AP1AR** | adaptor-related protein complex 1 associated regulatory protein | 18 | **0** |
| **AP5S1** | unknown | 6 | **0** |
| **ARF4** | ADP-ribosylation factor 4 | 31 | **0** |
| **ARGFXP2** | arginine-fifty homeobox pseudogene 2 | 1 | **0** |
| **ARHGAP11A** | Rho GTPase activating protein 11A | 10 | **0** |
| **ARL13A** | ADP-ribosylation factor-like 13A | 1 | **0** |
| **ARL3** | ADP-ribosylation factor-like 3 | 26 | **0** |
| **ARL5B** | ADP-ribosylation factor-like 5B | 14 | **0** |
| **ARMC2** | armadillo repeat containing 2 | 10 | **0** |
| **ARPC3** | actin related protein 2/3 complex, subunit 3, 21kDa | 26 | **0** |
| **ARSI** | arylsulfatase family, member I | 7 | **0** |

| | | | |
|---|---|---|---|
| **ATG14** | ATG14 autophagy related 14 homolog (S. cerevisiae) | 12 | **0** |
| **ATG3** | ATG3 autophagy related 3 homolog (S. cerevisiae) | 17 | **0** |
| **ATP5H** | ATP synthase, H+ transporting, mitochondrial Fo complex, subunit d | 21 | **0** |
| **ATP5L2** | ATP synthase, H+ transporting, mitochondrial Fo complex, subunit G2 | 3 | **0** |
| **ATP5S** | ATP synthase, H+ transporting, mitochondrial Fo complex, subunit s (factor B) | 14 | **0** |
| **ATP6V1H** | ATPase, H+ transporting, lysosomal 50/57kDa, V1 subunit H | 32 | **0** |
| **ATXN7L1** | ataxin 7-like 1 | 9 | **0** |
| **AVIL** | advillin | 7 | **0** |
| **B3GNTL1** | UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase-like 1 | 7 | **0** |
| **BCORP1** | BCL6 corepressor pseudogene 1 | 4 | **0** |
| **BCRP2** | breakpoint cluster region pseudogene 2 | 3 | **0** |
| **BDNF-AS** | unknown | 5 | **0** |
| **BHLHB9** | basic helix-loop-helix domain containing, class B, 9 | 8 | **0** |
| **BICD2** | bicaudal D homolog 2 (Drosophila) | 22 | **0** |
| **BLOC1S3** | biogenesis of lysosomal organelles complex-1, subunit 3 | 12 | **0** |
| **BMS1P5** | BMS1 pseudogene 5 | 2 | **0** |
| **BNC1** | basonuclin 1 | 17 | **0** |
| **BSN-AS2** | BSN antisense RNA 2 (non-protein coding) | 1 | **0** |
| **BTBD6** | BTB (POZ) domain containing 6 | 6 | **0** |
| **BTF3L4** | basic transcription factor 3-like 4 | 7 | **0** |
| **C10orf71** | chromosome 10 open reading frame 71 | 3 | **0** |
| **C10orf88** | chromosome 10 open reading frame 88 | 8 | **0** |
| **C11orf46** | chromosome 11 open reading frame 46 | 8 | **0** |
| **C11orf67** | chromosome 11 open reading frame 67 | 6 | **0** |
| **C11orf91** | chromosome 11 open reading frame 91 | 1 | **0** |
| **C11orf96** | chromosome 11 open reading frame 96 | 1 | **0** |
| **C12orf26** | chromosome 12 open reading frame 26 | 6 | **0** |
| **C12orf35** | chromosome 12 open reading frame 35 | 9 | **0** |
| **C12orf45** | chromosome 12 open reading frame 45 | 3 | **0** |

| | | | |
|---|---|---|---|
| **C12orf77** | chromosome 12 open reading frame 77 | 1 | **0** |
| **C13orf33** | chromosome 13 open reading frame 33 | 5 | **0** |
| **C14orf102** | chromosome 14 open reading frame 102 | 7 | **0** |
| **C14orf43** | chromosome 14 open reading frame 43 | 12 | **0** |
| **C14orf45** | chromosome 14 open reading frame 45 | 5 | **0** |
| **C15orf2** | chromosome 15 open reading frame 2 | 6 | **0** |
| **C15orf23** | chromosome 15 open reading frame 23 | 12 | **0** |
| **C15orf37** | chromosome 15 open reading frame 37 | 2 | **0** |
| **C16orf46** | chromosome 16 open reading frame 46 | 6 | **0** |
| **C16orf88** | chromosome 16 open reading frame 88 | 4 | **0** |
| **C17orf57** | chromosome 17 open reading frame 57 | 5 | **0** |
| **C17orf58** | chromosome 17 open reading frame 58 | 2 | **0** |
| **C17orf69** | chromosome 17 open reading frame 69 | 4 | **0** |
| **C18orf34** | chromosome 18 open reading frame 34 | 6 | **0** |
| **C18orf54** | chromosome 18 open reading frame 54 | 5 | **0** |
| **C19orf53** | chromosome 19 open reading frame 53 | 9 | **0** |
| **C1orf123** | chromosome 1 open reading frame 123 | 10 | **0** |
| **C1orf220** | chromosome 1 open reading frame 220 | 2 | **0** |
| **C1orf86** | chromosome 1 open reading frame 86 | 7 | **0** |
| **C1QTNF9B-AS1** | unknown | 3 | **0** |
| **C20orf11** | chromosome 20 open reading frame 11 | 14 | **0** |
| **C20orf112** | chromosome 20 open reading frame 112 | 10 | **0** |
| **C20orf118** | chromosome 20 open reading frame 118 | 1 | **0** |
| **C20orf194** | chromosome 20 open reading frame 194 | 10 | **0** |
| **C22orf13** | chromosome 22 open reading frame 13 | 5 | **0** |
| **C22orf29** | chromosome 22 open reading frame 29 | 5 | **0** |
| **C2orf27A** | chromosome 2 open reading frame 27A | 5 | **0** |
| **C2orf27B** | chromosome 2 open reading frame 27B | 2 | **0** |
| **C2orf55** | chromosome 2 open reading frame 55 | 4 | **0** |

| | | | |
|---|---|---|---|
| **C2orf68** | chromosome 2 open reading frame 68 | 4 | **0** |
| **C3orf24** | chromosome 3 open reading frame 24 | 3 | **0** |
| **C3orf27** | chromosome 3 open reading frame 27 | 2 | **0** |
| **C3orf38** | chromosome 3 open reading frame 38 | 5 | **0** |
| **C3orf43** | chromosome 3 open reading frame 43 | 2 | **0** |
| **C3orf70** | chromosome 3 open reading frame 70 | 2 | **0** |
| **C4orf46** | chromosome 4 open reading frame 46 | 4 | **0** |
| **C5orf22** | chromosome 5 open reading frame 22 | 10 | **0** |
| **C5orf30** | chromosome 5 open reading frame 30 | 6 | **0** |
| **C5orf51** | chromosome 5 open reading frame 51 | 6 | **0** |
| **C5orf54** | chromosome 5 open reading frame 54 | 4 | **0** |
| **C5orf56** | chromosome 5 open reading frame 56 | 10 | **0** |
| **C5orf63** | chromosome 5 open reading frame 63 | 1 | **0** |
| **C5orf64** | chromosome 5 open reading frame 64 | 2 | **0** |
| **C6orf163** | chromosome 6 open reading frame 163 | 2 | **0** |
| **C6orf203** | chromosome 6 open reading frame 203 | 10 | **0** |
| **C6orf52** | chromosome 6 open reading frame 52 | 1 | **0** |
| **C6orf62** | chromosome 6 open reading frame 62 | 7 | **0** |
| **C7orf31** | chromosome 7 open reading frame 31 | 5 | **0** |
| **C7orf57** | chromosome 7 open reading frame 57 | 3 | **0** |
| **C7orf60** | chromosome 7 open reading frame 60 | 5 | **0** |
| **C7orf62** | chromosome 7 open reading frame 62 | 4 | **0** |
| **C7orf65** | chromosome 7 open reading frame 65 | 2 | **0** |
| **C8orf37** | chromosome 8 open reading frame 37 | 5 | **0** |
| **C8orf59** | chromosome 8 open reading frame 59 | 6 | **0** |
| **C9orf139** | chromosome 9 open reading frame 139 | 2 | **0** |
| **C9orf152** | chromosome 9 open reading frame 152 | 4 | **0** |
| **C9orf16** | chromosome 9 open reading frame 16 | 7 | **0** |
| **C9orf80** | chromosome 9 open reading frame 80 | 10 | **0** |

| | | | |
|---|---|---|---|
| **CA13** | carbonic anhydrase XIII | 8 | **0** |
| **CAAP1** | unknown | 14 | **0** |
| **CAPN7** | calpain 7 | 10 | **0** |
| **CASS4** | Cas scaffolding protein family member 4 | 6 | **0** |
| **CBWD3** | COBW domain containing 3 | 6 | **0** |
| **CBWD6** | COBW domain containing 6 | 2 | **0** |
| **CBY3** | chibby homolog 3 (Drosophila) | 1 | **0** |
| **CCBL1** | cysteine conjugate-beta lyase, cytoplasmic | 21 | **0** |
| **CCDC120** | coiled-coil domain containing 120 | 7 | **0** |
| **CCDC122** | coiled-coil domain containing 122 | 5 | **0** |
| **CCDC144NL** | coiled-coil domain containing 144 family, N-terminal like | 1 | **0** |
| **CCDC146** | coiled-coil domain containing 146 | 6 | **0** |
| **CCDC53** | coiled-coil domain containing 53 | 12 | **0** |
| **CCDC82** | coiled-coil domain containing 82 | 9 | **0** |
| **CCDC83** | coiled-coil domain containing 83 | 4 | **0** |
| **CCDC99** | coiled-coil domain containing 99 | 10 | **0** |
| **CCNJL** | cyclin J-like | 2 | **0** |
| **CCNT2** | cyclin T2 | 28 | **0** |
| **CCZ1** | CCZ1 vacuolar protein trafficking and biogenesis associated homolog (S. cerevisiae) | 15 | **0** |
| **CDCA2** | cell division cycle associated 2 | 15 | **0** |
| **CDK13** | cyclin-dependent kinase 13 | 23 | **0** |
| **CDR2L** | cerebellar degeneration-related protein 2-like | 1 | **0** |
| **CELF5** | CUGBP, Elav-like family member 5 | 5 | **0** |
| **CENPK** | centromere protein K | 11 | **0** |
| **CENPN** | centromere protein N | 13 | **0** |
| **CENPQ** | centromere protein Q | 9 | **0** |
| **CEP128** | centrosomal protein 128kDa | 10 | **0** |
| **CEP135** | centrosomal protein 135kDa | 18 | **0** |
| **CEP170** | centrosomal protein 170kDa | 19 | **0** |

| | | | |
|---|---|---|---|
| **CEP19** | centrosomal protein 19kDa | 6 | **0** |
| **CEP192** | centrosomal protein 192kDa | 22 | **0** |
| **CEP68** | centrosomal protein 68kDa | 14 | **0** |
| **CERK** | ceramide kinase | 29 | **0** |
| **CHTF18** | CTF18, chromosome transmission fidelity factor 18 homolog (S. cerevisiae) | 16 | **0** |
| **CLP1** | CLP1, cleavage and polyadenylation factor I subunit, homolog (S. cerevisiae) | 13 | **0** |
| **CMC1** | COX assembly mitochondrial protein homolog (S. cerevisiae) | 4 | **0** |
| **CNBP** | CCHC-type zinc finger, nucleic acid binding protein | 35 | **0** |
| **CNEP1R1** | unknown | 3 | **0** |
| **CNGB1** | cyclic nucleotide gated channel beta 1 | 23 | **0** |
| **CNOT6L** | CCR4-NOT transcription complex, subunit 6-like | 11 | **0** |
| **COIL** | coilin | 54 | **0** |
| **COL27A1** | collagen, type XXVII, alpha 1 | 9 | **0** |
| **COL6A4P2** | collagen, type VI, alpha 4 pseudogene 2 | 3 | **0** |
| **COPA** | coatomer protein complex, subunit alpha | 46 | **0** |
| **COPB1** | coatomer protein complex, subunit beta 1 | 54 | **0** |
| **COX14** | unknown | 8 | **0** |
| **COX17** | COX17 cytochrome c oxidase assembly homolog (S. cerevisiae) | 23 | **0** |
| **CPSF6** | cleavage and polyadenylation specific factor 6, 68kDa | 33 | **0** |
| **CRNDE** | colorectal neoplasia differentially expressed (non-protein coding) | 3 | **0** |
| **CRNKL1** | crooked neck pre-mRNA splicing factor-like 1 (Drosophila) | 12 | **0** |
| **CSDC2** | cold shock domain containing C2, RNA binding | 14 | **0** |
| **CSRP2BP** | CSRP2 binding protein | 14 | **0** |
| **CSTF2T** | cleavage stimulation factor, 3' pre-RNA, subunit 2, 64kDa, tau variant | 22 | **0** |
| **CWC15** | CWC15 spliceosome-associated protein homolog (S. cerevisiae) | 13 | **0** |
| **CWC25** | CWC25 spliceosome-associated protein homolog (S. cerevisiae) | 5 | **0** |
| **CXorf23** | chromosome X open reading frame 23 | 3 | **0** |
| **CYLC2** | cylicin, basic protein of sperm head cytoskeleton 2 | 8 | **0** |
| **CYP4F30P** | cytochrome P450, family 4, subfamily F, polypeptide 30, pseudogene | 3 | **0** |

| | | | |
|---|---|---|---|
| **DARS** | aspartyl-tRNA synthetase | 34 | **0** |
| **DAZAP1** | DAZ associated protein 1 | 19 | **0** |
| **DCAF4L1** | DDB1 and CUL4 associated factor 4-like 1 | 3 | **0** |
| **DCUN1D2** | DCN1, defective in cullin neddylation 1, domain containing 2 (S. cerevisiae) | 7 | **0** |
| **DDX31** | DEAD (Asp-Glu-Ala-Asp) box polypeptide 31 | 10 | **0** |
| **DENND4A** | DENN/MADD domain containing 4A | 13 | **0** |
| **DHDDS** | dehydrodolichyl diphosphate synthase | 13 | **0** |
| **DHRS1** | dehydrogenase/reductase (SDR family) member 1 | 17 | **0** |
| **DHRS12** | dehydrogenase/reductase (SDR family) member 12 | 5 | **0** |
| **DHRS4-AS1** | unknown | 2 | **0** |
| **DHX35** | DEAH (Asp-Glu-Ala-His) box polypeptide 35 | 12 | **0** |
| **DHX8** | DEAH (Asp-Glu-Ala-His) box polypeptide 8 | 10 | **0** |
| **DIAPH3** | diaphanous homolog 3 (Drosophila) | 25 | **0** |
| **DIS3L** | DIS3 mitotic control homolog (S. cerevisiae)-like | 9 | **0** |
| **DISC1** | disrupted in schizophrenia 1 | 149 | **0** |
| **DISC2** | disrupted in schizophrenia 2 (non-protein coding) | 5 | **0** |
| **DKFZP564C196** | hypothetical LOC284649 | 1 | **0** |
| **DLX1** | distal-less homeobox 1 | 14 | **0** |
| **DMBX1** | diencephalon/mesencephalon homeobox 1 | 5 | **0** |
| **DNAH3** | dynein, axonemal, heavy chain 3 | 8 | **0** |
| **DNAL1** | dynein, axonemal, light chain 1 | 6 | **0** |
| **DNAPTP3** | histone demethylase UTY-like | 1 | **0** |
| **DNM1P41** | DNM1 pseudogene 41 | 1 | **0** |
| **DNM1P46** | DNM1 pseudogene 46 | 3 | **0** |
| **DNMBP** | dynamin binding protein | 15 | **0** |
| **DOCK6** | dedicator of cytokinesis 6 | 13 | **0** |
| **DSTN** | destrin (actin depolymerizing factor) | 30 | **0** |
| **DTWD2** | DTW domain containing 2 | 7 | **0** |
| **DUSP12** | dual specificity phosphatase 12 | 18 | **0** |

| | | | |
|---|---|---|---|
| **DUSP18** | dual specificity phosphatase 18 | 9 | **0** |
| **DYDC1** | DPY30 domain containing 1 | 6 | **0** |
| **DYNC1I2** | dynein, cytoplasmic 1, intermediate chain 2 | 28 | **0** |
| **DZIP1L** | DAZ interacting protein 1-like | 4 | **0** |
| **ECT2L** | epithelial cell transforming sequence 2 oncogene-like | 3 | **0** |
| **EFCAB7** | EF-hand calcium binding domain 7 | 6 | **0** |
| **EFTUD1** | elongation factor Tu GTP binding domain containing 1 | 7 | **0** |
| **EIF1AD** | eukaryotic translation initiation factor 1A domain containing | 11 | **0** |
| **EIF4E2** | eukaryotic translation initiation factor 4E family member 2 | 20 | **0** |
| **EIF4G2** | eukaryotic translation initiation factor 4 gamma, 2 | 46 | **0** |
| **ELMOD3** | ELMO/CED-12 domain containing 3 | 8 | **0** |
| **EML1** | echinoderm microtubule associated protein like 1 | 12 | **0** |
| **ENOX1** | ecto-NOX disulfide-thiol exchanger 1 | 12 | **0** |
| **ENY2** | enhancer of yellow 2 homolog (Drosophila) | 11 | **0** |
| **EPG5** | ectopic P-granules autophagy protein 5 homolog (C. elegans) | 10 | **0** |
| **ERCC6L** | excision repair cross-complementing rodent repair deficiency, complementation group 6-like | 15 | **0** |
| **ERI1** | exoribonuclease 1 | 12 | **0** |
| **EXOSC8** | exosome component 8 | 18 | **0** |
| **FABP5P3** | fatty acid binding protein 5 pseudogene 3 | 1 | **0** |
| **FAHD1** | fumarylacetoacetate hydrolase domain containing 1 | 16 | **0** |
| **FAM104A** | family with sequence similarity 104, member A | 5 | **0** |
| **FAM105B** | family with sequence similarity 105, member B | 7 | **0** |
| **FAM111B** | family with sequence similarity 111, member B | 7 | **0** |
| **FAM116A** | family with sequence similarity 116, member A | 4 | **0** |
| **FAM117A** | family with sequence similarity 117, member A | 2 | **0** |
| **FAM120B** | family with sequence similarity 120B | 10 | **0** |
| **FAM123C** | family with sequence similarity 123C | 3 | **0** |
| **FAM127C** | family with sequence similarity 127, member C | 5 | **0** |
| **FAM136A** | family with sequence similarity 136, member A | 15 | **0** |

| | | | |
|---|---|---|---|
| **FAM138A** | family with sequence similarity 138, member A | 6 | **0** |
| **FAM161B** | family with sequence similarity 161, member B | 4 | **0** |
| **FAM168A** | family with sequence similarity 168, member A | 7 | **0** |
| **FAM178A** | family with sequence similarity 178, member A | 8 | **0** |
| **FAM181A-AS1** | unknown | 1 | **0** |
| **FAM181B** | family with sequence similarity 181, member B | 2 | **0** |
| **FAM184B** | family with sequence similarity 184, member B | 2 | **0** |
| **FAM186B** | family with sequence similarity 186, member B | 9 | **0** |
| **FAM198B** | family with sequence similarity 198, member B | 9 | **0** |
| **FAM214B** | unknown | 9 | **0** |
| **FAM221A** | unknown | 3 | **0** |
| **FAM22D** | family with sequence similarity 22, member D | 1 | **0** |
| **FAM40A** | family with sequence similarity 40, member A | 17 | **0** |
| **FAM41C** | family with sequence similarity 41, member C | 2 | **0** |
| **FAM43A** | family with sequence similarity 43, member A | 5 | **0** |
| **FAM54A** | family with sequence similarity 54, member A | 8 | **0** |
| **FAM71E1** | family with sequence similarity 71, member E1 | 1 | **0** |
| **FAM76A** | family with sequence similarity 76, member A | 5 | **0** |
| **FAM78A** | family with sequence similarity 78, member A | 6 | **0** |
| **FAM92B** | family with sequence similarity 92, member B | 3 | **0** |
| **FASTKD1** | FAST kinase domains 1 | 6 | **0** |
| **FBXL18** | F-box and leucine-rich repeat protein 18 | 7 | **0** |
| **FBXL19-AS1** | FBXL19 antisense RNA 1 (non-protein coding) | 3 | **0** |
| **FBXL2** | F-box and leucine-rich repeat protein 2 | 13 | **0** |
| **FBXL22** | F-box and leucine-rich repeat protein 22 | 8 | **0** |
| **FBXL6** | F-box and leucine-rich repeat protein 6 | 11 | **0** |
| **FBXL7** | F-box and leucine-rich repeat protein 7 | 12 | **0** |
| **FBXO17** | F-box protein 17 | 10 | **0** |
| **FBXO45** | F-box protein 45 | 6 | **0** |

| | | | |
|---|---|---|---|
| **FBXW4P1** | F-box and WD repeat domain containing 4 pseudogene 1 | 8 | **0** |
| **FCHSD2** | FCH and double SH3 domains 2 | 12 | **0** |
| **FDXACB1** | ferredoxin-fold anticodon binding domain containing 1 | 5 | **0** |
| **FGGY** | FGGY carbohydrate kinase domain containing | 13 | **0** |
| **FKBP9L** | FK506 binding protein 9-like | 3 | **0** |
| **FLG2** | filaggrin family member 2 | 5 | **0** |
| **FLJ10038** | hypothetical protein FLJ10038 | 2 | **0** |
| **FLJ31306** | hypothetical LOC379025 | 2 | **0** |
| **FLJ32063** | hypothetical LOC150538 | 2 | **0** |
| **FLJ33360** | FLJ33360 protein | 3 | **0** |
| **FLJ36777** | hypothetical LOC730971 | 2 | **0** |
| **FLJ37453** | hypothetical LOC729614 | 3 | **0** |
| **FLJ39639** | hypothetical protein FLJ39639 | 3 | **0** |
| **FLJ40852** | hypothetical LOC285962 | 3 | **0** |
| **FLJ41200** | hypothetical LOC401492 | 2 | **0** |
| **FLJ41423** | hypothetical LOC399886 | 1 | **0** |
| **FLJ41757** | hypothetical LOC440862 | 1 | **0** |
| **FLJ44881** | FLJ44881 | 1 | **0** |
| **FLJ45256** | hypothetical LOC400511 | 1 | **0** |
| **FOXN2** | forkhead box N2 | 7 | **0** |
| **FOXO3B** | forkhead box O3B pseudogene | 3 | **0** |
| **FREM3** | FRAS1 related extracellular matrix 3 | 2 | **0** |
| **FUK** | fucokinase | 6 | **0** |
| **FXC1** | fracture callus 1 homolog (rat) | 10 | **0** |
| **G2E3** | G2/M-phase specific E3 ubiquitin protein ligase | 15 | **0** |
| **GADL1** | glutamate decarboxylase-like 1 | 1 | **0** |
| **GATAD1** | GATA zinc finger domain containing 1 | 9 | **0** |
| **GATC** | glutamyl-tRNA(Gln) amidotransferase, subunit C homolog (bacterial) | 6 | **0** |
| **GBAP1** | glucosidase, beta, acid pseudogene 1 | 13 | **0** |

| | | | |
|---|---|---|---|
| **GBP4** | guanylate binding protein 4 | 6 | **0** |
| **GBP6** | guanylate binding protein family, member 6 | 11 | **0** |
| **GCFC1** | GC-rich sequence DNA-binding factor 1 | 15 | **0** |
| **GDAP2** | ganglioside induced differentiation associated protein 2 | 7 | **0** |
| **GEMIN8** | gem (nuclear organelle) associated protein 8 | 8 | **0** |
| **GHRLOS** | ghrelin opposite strand RNA (non-protein coding) | 2 | **0** |
| **GIMAP8** | GTPase, IMAP family member 8 | 10 | **0** |
| **GINS4** | GINS complex subunit 4 (Sld5 homolog) | 6 | **0** |
| **GNG5** | guanine nucleotide binding protein (G protein), gamma 5 | 20 | **0** |
| **GNGT2** | guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 2 | 16 | **0** |
| **GNPNAT1** | glucosamine-phosphate N-acetyltransferase 1 | 7 | **0** |
| **GOLGA6L10** | golgin A6 family-like 10 | 2 | **0** |
| **GOLGA6L5** | golgin A6 family-like 5 (pseudogene) | 4 | **0** |
| **GOLGA6L9** | golgin A6 family-like 9 | 1 | **0** |
| **GOLGA8DP** | golgin A8 family, member D, pseudogene | 3 | **0** |
| **GOLGA8E** | golgin A8 family, member E | 1 | **0** |
| **GPATCH1** | G patch domain containing 1 | 5 | **0** |
| **GSTTP1** | glutathione S-transferase theta pseudogene 1 | 1 | **0** |
| **GTF2H2** | general transcription factor IIH, polypeptide 2, 44kDa | 63 | **0** |
| **GTF2H2C** | general transcription factor IIH, polypeptide 2C | 2 | **0** |
| **GTF2H5** | general transcription factor IIH, polypeptide 5 | 15 | **0** |
| **GTF2IRD2P1** | GTF2I repeat domain containing 2 pseudogene 1 | 1 | **0** |
| **GTF3C2** | general transcription factor IIIC, polypeptide 2, beta 110kDa | 25 | **0** |
| **GTPBP2** | GTP binding protein 2 | 8 | **0** |
| **GUCA1B** | guanylate cyclase activator 1B (retina) | 14 | **0** |
| **GYG2P1** | glycogenin 2 pseudogene 1 | 4 | **0** |
| **H2BFXP** | H2B histone family, member X, pseudogene | 1 | **0** |
| **H3F3AP4** | unknown | 3 | **0** |
| **H3F3C** | H3 histone, family 3C | 7 | **0** |

| | | | |
|---|---|---|---|
| **HAUS1** | HAUS augmin-like complex, subunit 1 | 14 | **0** |
| **HAUS5** | HAUS augmin-like complex, subunit 5 | 10 | **0** |
| **HDGFRP3** | hepatoma-derived growth factor, related protein 3 | 10 | **0** |
| **HEATR4** | HEAT repeat containing 4 | 5 | **0** |
| **HECW2** | HECT, C2 and WW domain containing E3 ubiquitin protein ligase 2 | 7 | **0** |
| **HELQ** | helicase, POLQ-like | 13 | **0** |
| **HERC2P2** | hect domain and RLD 2 pseudogene 2 | 9 | **0** |
| **HERC4** | hect domain and RLD 4 | 15 | **0** |
| **HMGN3** | high mobility group nucleosomal binding domain 3 | 14 | **0** |
| **HNF1A-AS1** | HNF1A antisense RNA 1 (non-protein coding) | 3 | **0** |
| **HNRNPA1L2** | heterogeneous nuclear ribonucleoprotein A1-like 2 | 4 | **0** |
| **HOGA1** | 4-hydroxy-2-oxoglutarate aldolase 1 | 11 | **0** |
| **HOMER3** | homer homolog 3 (Drosophila) | 20 | **0** |
| **HOTAIRM1** | HOXA transcript antisense RNA, myeloid-specific 1 (non-protein coding) | 1 | **0** |
| **HOXA2** | homeobox A2 | 13 | **0** |
| **HPCA** | hippocalcin | 17 | **0** |
| **HSFY1** | heat shock transcription factor, Y-linked 1 | 7 | **0** |
| **HSP90AB3P** | heat shock protein 90kDa alpha (cytosolic), class B member 3, pseudogene | 6 | **0** |
| **HTA** | hypothetical LOC283902 | 2 | **0** |
| **HYMAI** | hydatidiform mole associated and imprinted (non-protein coding) | 7 | **0** |
| **IDI2** | isopentenyl-diphosphate delta isomerase 2 | 10 | **0** |
| **IFLTD1** | intermediate filament tail domain containing 1 | 6 | **0** |
| **IFT20** | intraflagellar transport 20 homolog (Chlamydomonas) | 14 | **0** |
| **IFT43** | intraflagellar transport 43 homolog (Chlamydomonas) | 10 | **0** |
| **IKZF4** | IKAROS family zinc finger 4 (Eos) | 13 | **0** |
| **IMPA1** | inositol(myo)-1(or 4)-monophosphatase 1 | 26 | **0** |
| **INO80D** | INO80 complex subunit D | 9 | **0** |
| **INTS7** | integrator complex subunit 7 | 19 | **0** |
| **INTS8** | integrator complex subunit 8 | 12 | **0** |

| | | | |
|---|---|---|---|
| **INTU** | inturned planar cell polarity effector homolog (Drosophila) | 8 | **0** |
| **IPO11** | importin 11 | 16 | **0** |
| **IPO9** | importin 9 | 19 | **0** |
| **IQGAP3** | IQ motif containing GTPase activating protein 3 | 8 | **0** |
| **ITPRIP** | inositol 1,4,5-trisphosphate receptor interacting protein | 11 | **0** |
| **JRK** | jerky homolog (mouse) | 6 | **0** |
| **KANSL2** | unknown | 12 | **0** |
| **KBTBD12** | kelch repeat and BTB (POZ) domain containing 12 | 5 | **0** |
| **KBTBD4** | kelch repeat and BTB (POZ) domain containing 4 | 10 | **0** |
| **KBTBD6** | kelch repeat and BTB (POZ) domain containing 6 | 7 | **0** |
| **KCTD20** | potassium channel tetramerisation domain containing 20 | 10 | **0** |
| **KIAA0391** | KIAA0391 | 11 | **0** |
| **KIAA0408** | KIAA0408 | 9 | **0** |
| **KIAA0586** | KIAA0586 | 12 | **0** |
| **KIAA0825** | KIAA0825 | 9 | **0** |
| **KIAA0895L** | KIAA0895-like | 2 | **0** |
| **KIAA0907** | KIAA0907 | 8 | **0** |
| **KIAA1147** | KIAA1147 | 4 | **0** |
| **KIAA1279** | KIAA1279 | 13 | **0** |
| **KIAA1614** | KIAA1614 | 5 | **0** |
| **KIAA1737** | KIAA1737 | 6 | **0** |
| **KIAA1751** | KIAA1751 | 3 | **0** |
| **KIAA1841** | KIAA1841 | 5 | **0** |
| **KLHDC10** | kelch domain containing 10 | 5 | **0** |
| **KLHL26** | kelch-like 26 (Drosophila) | 11 | **0** |
| **KLHL7** | kelch-like 7 (Drosophila) | 16 | **0** |
| **KLHL7-AS1** | unknown | 1 | **0** |
| **KNTC1** | kinetochore associated 1 | 17 | **0** |
| **KRBA2** | KRAB-A domain containing 2 | 1 | **0** |

| | | | |
|---|---|---|---|
| **KRT42P** | keratin 42 pseudogene | 2 | **0** |
| **LAMB2P1** | laminin, beta 2 pseudogene 1 | 3 | **0** |
| **LAMTOR2** | late endosomal/lysosomal adaptor, MAPK and MTOR activator 2 | 8 | **0** |
| **LARP4B** | La ribonucleoprotein domain family, member 4B | 12 | **0** |
| **LDHAL6A** | lactate dehydrogenase A-like 6A | 4 | **0** |
| **LIMS3** | LIM and senescent cell antigen-like domains 3 | 7 | **0** |
| **LINC00221** | unknown | 2 | **0** |
| **LINC00256B** | unknown | 4 | **0** |
| **LINC00338** | long intergenic non-protein coding RNA 338 | 2 | **0** |
| **LINC00341** | long intergenic non-protein coding RNA 341 | 4 | **0** |
| **LINC00452** | unknown | 2 | **0** |
| **LINC00471** | unknown | 1 | **0** |
| **LINC00476** | unknown | 3 | **0** |
| **LINC00483** | unknown | 2 | **0** |
| **LINC00488** | unknown | 2 | **0** |
| **LINC00493** | unknown | 2 | **0** |
| **LINC00507** | unknown | 1 | **0** |
| **LINC00514** | unknown | 1 | **0** |
| **LINC00558** | unknown | 1 | **0** |
| **LINC00575** | unknown | 1 | **0** |
| **LIX1** | Lix1 homolog (chicken) | 8 | **0** |
| **LOC100125556** | family with sequence similarity 86, member A pseudogene | 3 | **0** |
| **LOC100128126** | hypothetical LOC100128126 | 1 | **0** |
| **LOC100128252** | hypothetical LOC100128252 | 1 | **0** |
| **LOC100128292** | hypothetical LOC100128292 | 2 | **0** |
| **LOC100128531** | hypothetical LOC100128531 | 1 | **0** |
| **LOC100128682** | hypothetical LOC100128682 | 1 | **0** |
| **LOC100128822** | hypothetical LOC100128822 | 2 | **0** |
| **LOC100129055** | cyclin Y-like pseudogene | 1 | **0** |

| | | | |
|---|---|---|---|
| **LOC100129213** | hypothetical LOC100129213 | 1 | **0** |
| **LOC100129502** | hypothetical LOC100129502 | 1 | **0** |
| **LOC100129516** | hypothetical protein LOC100129516 | 1 | **0** |
| **LOC100129636** | hypothetical protein LOC100129636 | 1 | **0** |
| **LOC100129858** | hypothetical LOC100129858 | 1 | **0** |
| **LOC100129935** | lectin, galactoside-binding, soluble, 14 pseudogene | 1 | **0** |
| **LOC100130000** | Neuroblastoma breakpoint family member 6-like protein | 2 | **0** |
| **LOC100130219** | hypothetical LOC100130219 | 1 | **0** |
| **LOC100130331** | actin, gamma-like | 1 | **0** |
| **LOC100130557** | hypothetical LOC100130557 | 2 | **0** |
| **LOC100130581** | hypothetical LOC100130581 | 2 | **0** |
| **LOC100130855** | hypothetical LOC100130855 | 2 | **0** |
| **LOC100131047** | hypothetical LOC100131047 | 2 | **0** |
| **LOC100131089** | hypothetical LOC100131089 | 1 | **0** |
| **LOC100131096** | hypothetical LOC100131096 | 2 | **0** |
| **LOC100131347** | RAD52 motif 1 pseudogene | 2 | **0** |
| **LOC100131496** | hypothetical LOC100131496 | 1 | **0** |
| **LOC100131541** | hypothetical LOC100131541 | 1 | **0** |
| **LOC100131655** | hypothetical LOC100131655 | 2 | **0** |
| **LOC100131691** | hypothetical LOC100131691 | 2 | **0** |
| **LOC100132352** | FSHD region gene 1 pseudogene | 2 | **0** |
| **LOC100132356** | hypothetical LOC100132356 | 2 | **0** |
| **LOC100132707** | hypothetical LOC100132707 | 2 | **0** |
| **LOC100132832** | postmeiotic segregation increased 2-like 5-like | 1 | **0** |
| **LOC100144595** | hypothetical LOC100144595 | 1 | **0** |
| **LOC100147773** | hypothetical LOC100147773 | 2 | **0** |
| **LOC100170939** | glucuronidase, beta pseudogene | 1 | **0** |
| **LOC100216545** | hypothetical LOC100216545 | 2 | **0** |
| **LOC100233156** | tektin 4 pseudogene | 4 | **0** |

| | | | |
|---|---|---|---|
| **LOC100270679** | hypothetical LOC100270679 | 1 | **0** |
| **LOC100270804** | hypothetical LOC100270804 | 2 | **0** |
| **LOC100287216** | hypothetical LOC100287216 | 2 | **0** |
| **LOC100287497** | hypothetical LOC100287497 | 1 | **0** |
| **LOC100289561** | hypothetical LOC100289561 | 1 | **0** |
| **LOC100303749** | LSM3 homolog, U6 small nuclear RNA associated (S. cerevisiae) pseudogene | 1 | **0** |
| **LOC100379224** | hypothetical LOC100379224 | 1 | **0** |
| **LOC100498859** | hypothetical LOC100498859 | 1 | **0** |
| **LOC100499405** | hypothetical LOC100499405 | 1 | **0** |
| **LOC100499466** | hypothetical LOC100499466 | 4 | **0** |
| **LOC100505659** | hypothetical LOC100505659 | 1 | **0** |
| **LOC100505687** | hypothetical LOC100505687 | 2 | **0** |
| **LOC100505776** | hypothetical LOC100505776 | 1 | **0** |
| **LOC100505783** | hypothetical LOC100505783 | 2 | **0** |
| **LOC100505835** | hypothetical LOC100505835 | 2 | **0** |
| **LOC100505865** | hypothetical LOC100505865 | 2 | **0** |
| **LOC100506035** | hypothetical LOC100506035 | 1 | **0** |
| **LOC100506100** | hypothetical LOC100506100 | 1 | **0** |
| **LOC100506122** | hypothetical LOC100506122 | 1 | **0** |
| **LOC100506305** | hypothetical LOC100506305 | 1 | **0** |
| **LOC100506343** | hypothetical LOC100506343 | 1 | **0** |
| **LOC100506392** | hypothetical LOC100506392 | 1 | **0** |
| **LOC100506462** | hypothetical LOC100506462 | 1 | **0** |
| **LOC100506540** | hypothetical LOC100506540 | 1 | **0** |
| **LOC100506544** | hypothetical LOC100506544 | 1 | **0** |
| **LOC100506639** | hypothetical LOC100506639 | 3 | **0** |
| **LOC100506710** | hypothetical LOC100506710 | 2 | **0** |
| **LOC100506844** | hypothetical LOC100506844 | 2 | **0** |
| **LOC100506866** | hypothetical LOC100506866 | 3 | **0** |

| | | | |
|---|---|---|---|
| **LOC100506874** | hypothetical LOC100506874 | 2 | **0** |
| **LOC100506994** | hypothetical LOC100506994 | 2 | **0** |
| **LOC100507117** | hypothetical LOC100507117 | 1 | **0** |
| **LOC100507127** | hypothetical LOC100507127 | 1 | **0** |
| **LOC100507246** | hypothetical LOC100507246 | 1 | **0** |
| **LOC100507254** | hypothetical LOC100507254 | 1 | **0** |
| **LOC100507334** | two pore channel 3 pseudogene | 1 | **0** |
| **LOC100507437** | hypothetical LOC100507437 | 1 | **0** |
| **LOC100507567** | hypothetical LOC100507567 | 1 | **0** |
| **LOC100507584** | hypothetical LOC100507584 | 2 | **0** |
| **LOC100507600** | hypothetical LOC100507600 | 1 | **0** |
| **LOC100509894** | hypothetical LOC100509894 | 1 | **0** |
| **LOC100616668** | TPTE2 pseudogene | 3 | **0** |
| **LOC100630923** | LOC100289561-PRKRIP1 readthrough | 2 | **0** |
| **LOC145474** | hypothetical LOC145474 | 1 | **0** |
| **LOC145783** | hypothetical LOC145783 | 2 | **0** |
| **LOC146880** | hypothetical LOC146880 | 4 | **0** |
| **LOC150622** | hypothetical LOC150622 | 3 | **0** |
| **LOC150935** | hypothetical LOC150935 | 1 | **0** |
| **LOC151475** | hypothetical LOC151475 | 1 | **0** |
| **LOC152217** | hypothetical LOC152217 | 3 | **0** |
| **LOC152578** | hypothetical LOC152578 | 1 | **0** |
| **LOC154761** | hypothetical LOC154761 | 2 | **0** |
| **LOC157381** | hypothetical LOC157381 | 4 | **0** |
| **LOC158434** | hypothetical LOC158434 | 1 | **0** |
| **LOC170425** | hypothetical LOC170425 | 2 | **0** |
| **LOC219731** | hypothetical LOC219731 | 1 | **0** |
| **LOC220906** | hypothetical LOC220906 | 3 | **0** |
| **LOC256021** | hypothetical protein LOC256021 | 2 | **0** |

| | | | |
|---|---|---|---|
| **LOC256880** | hypothetical LOC256880 | 1 | **0** |
| **LOC257396** | hypothetical LOC257396 | 2 | **0** |
| **LOC282980** | hypothetical LOC282980 | 1 | **0** |
| **LOC283143** | hypothetical LOC283143 | 3 | **0** |
| **LOC283177** | hypothetical LOC283177 | 2 | **0** |
| **LOC283663** | hypothetical LOC283663 | 2 | **0** |
| **LOC283683** | hypothetical LOC283683 | 1 | **0** |
| **LOC283693** | actin, gamma pseudogene | 1 | **0** |
| **LOC284294** | hypothetical LOC284294 | 1 | **0** |
| **LOC284578** | hypothetical LOC284578 | 3 | **0** |
| **LOC284865** | hypothetical LOC284865 | 2 | **0** |
| **LOC285074** | anaphase promoting complex subunit 1 pseudogene | 3 | **0** |
| **LOC285084** | hypothetical LOC285084 | 1 | **0** |
| **LOC285103** | hypothetical LOC285103 | 2 | **0** |
| **LOC285419** | hypothetical LOC285419 | 1 | **0** |
| **LOC285889** | hypothetical LOC285889 | 3 | **0** |
| **LOC285972** | hypothetical LOC285972 | 3 | **0** |
| **LOC286094** | hypothetical LOC286094 | 1 | **0** |
| **LOC286186** | hypothetical LOC286186 | 2 | **0** |
| **LOC286297** | hypothetical LOC286297 | 1 | **0** |
| **LOC286359** | hypothetical LOC286359 | 3 | **0** |
| **LOC286370** | hypothetical LOC286370 | 1 | **0** |
| **LOC339505** | hypothetical LOC339505 | 2 | **0** |
| **LOC339788** | hypothetical LOC339788 | 1 | **0** |
| **LOC339803** | hypothetical LOC339803 | 3 | **0** |
| **LOC339894** | hypothetical LOC339894 | 1 | **0** |
| **LOC387723** | hypothetical LOC387723 | 1 | **0** |
| **LOC388152** | hypothetical LOC388152 | 2 | **0** |
| **LOC389834** | ankyrin repeat domain 57 pseudogene | 1 | **0** |

| | | | |
|---|---|---|---|
| **LOC400657** | hypothetical LOC400657 | 3 | **0** |
| **LOC400706** | hypothetical LOC400706 | 1 | **0** |
| **LOC400768** | hypothetical LOC400768 | 1 | **0** |
| **LOC400891** | chromosome 14 open reading frame 166B pseudogene | 1 | **0** |
| **LOC401176** | hypothetical LOC401176 | 1 | **0** |
| **LOC440040** | glutamate receptor, metabotropic 5 pseudogene | 1 | **0** |
| **LOC441179** | hypothetical LOC441179 | 1 | **0** |
| **LOC442075** | hypothetical LOC442075 | 2 | **0** |
| **LOC541471** | hypothetical LOC541471 | 2 | **0** |
| **LOC541473** | FK506 binding protein 6, 36kDa pseudogene | 1 | **0** |
| **LOC554249** | hypothetical LOC554249 | 1 | **0** |
| **LOC595101** | PI-3-kinase-related kinase SMG-1 pseudogene | 3 | **0** |
| **LOC643355** | hypothetical LOC643355 | 1 | **0** |
| **LOC643401** | hypothetical LOC643401 | 1 | **0** |
| **LOC643770** | hypothetical LOC643770 | 1 | **0** |
| **LOC644936** | actin, beta pseudogene | 1 | **0** |
| **LOC645212** | hypothetical LOC645212 | 1 | **0** |
| **LOC646168** | hypothetical LOC646168 | 1 | **0** |
| **LOC646278** | programmed cell death 6 interacting protein pseudogene | 1 | **0** |
| **LOC646329** | hypothetical LOC646329 | 4 | **0** |
| **LOC646762** | hypothetical LOC646762 | 2 | **0** |
| **LOC646999** | akirin 1 pseudogene | 1 | **0** |
| **LOC647107** | hypothetical LOC647107 | 2 | **0** |
| **LOC647946** | hypothetical LOC647946 | 4 | **0** |
| **LOC648570** | hypothetical LOC648570 | 1 | **0** |
| **LOC648987** | hypothetical LOC648987 | 2 | **0** |
| **LOC649395** | tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon polypeptide pseudogene | 1 | **0** |
| **LOC650157** | peptidyl-prolyl cis-trans isomerase A-like | 3 | **0** |

| | | | |
|---|---|---|---|
| **LOC653786** | otoancorin pseudogene | 2 | **0** |
| **LOC727849** | golgin A2 pseudogene | 3 | **0** |
| **LOC727924** | hypothetical LOC727924 | 2 | **0** |
| **LOC728323** | hypothetical LOC728323 | 1 | **0** |
| **LOC728342** | hypothetical protein LOC728342 | 1 | **0** |
| **LOC728485** | hypothetical LOC728485 | 2 | **0** |
| **LOC728558** | hypothetical LOC728558 | 3 | **0** |
| **LOC728758** | protein (peptidylprolyl cis/trans isomerase) NIMA-interacting, 4 (parvulin) pseudogene | 2 | **0** |
| **LOC729173** | hypothetical LOC729173 | 1 | **0** |
| **LOC729852** | hypothetical LOC729852 | 3 | **0** |
| **LOC90784** | hypothetical LOC90784 | 2 | **0** |
| **LOC92249** | hypothetical LOC92249 | 1 | **0** |
| **LOC93622** | hypothetical LOC93622 | 1 | **0** |
| **LRRC56** | leucine rich repeat containing 56 | 3 | **0** |
| **LRRIQ3** | leucine-rich repeats and IQ motif containing 3 | 2 | **0** |
| **LSM11** | LSM11, U7 small nuclear RNA associated | 10 | **0** |
| **LSM12** | LSM12 homolog (S. cerevisiae) | 9 | **0** |
| **LSM14B** | LSM14B, SCD6 homolog B (S. cerevisiae) | 8 | **0** |
| **LYRM1** | LYR motif containing 1 | 9 | **0** |
| **LYRM7** | Lyrm7 homolog (mouse) | 6 | **0** |
| **LYSMD1** | LysM, putative peptidoglycan-binding, domain containing 1 | 5 | **0** |
| **MAB21L1** | mab-21-like 1 (C. elegans) | 9 | **0** |
| **MAFG-AS1** | unknown | 1 | **0** |
| **MAGOH** | mago-nashi homolog, proliferation-associated (Drosophila) | 29 | **0** |
| **MAP1LC3C** | microtubule-associated protein 1 light chain 3 gamma | 10 | **0** |
| **MASTL** | microtubule associated serine/threonine kinase-like | 21 | **0** |
| **MB21D2** | Mab-21 domain containing 2 | 5 | **0** |
| **MBL1P** | mannose-binding lectin (protein A) 1, pseudogene | 6 | **0** |
| **MBTD1** | mbt domain containing 1 | 5 | **0** |

| | | | |
|---|---|---|---|
| **MCM9** | minichromosome maintenance complex component 9 | 13 | **0** |
| **MCMBP** | minichromosome maintenance complex binding protein | 21 | **0** |
| **MDS2** | myelodysplastic syndrome 2 translocation associated | 4 | **0** |
| **MED11** | mediator complex subunit 11 | 7 | **0** |
| **MED20** | mediator complex subunit 20 | 17 | **0** |
| **METTL14** | methyltransferase like 14 | 7 | **0** |
| **METTL16** | methyltransferase like 16 | 7 | **0** |
| **METTL2B** | methyltransferase like 2B | 10 | **0** |
| **METTL4** | methyltransferase like 4 | 6 | **0** |
| **MEX3B** | mex-3 homolog B (C. elegans) | 18 | **0** |
| **MEX3D** | mex-3 homolog D (C. elegans) | 5 | **0** |
| **MGC16121** | hypothetical protein MGC16121 | 2 | **0** |
| **MGC27345** | hypothetical protein MGC27345 | 1 | **0** |
| **MGC2889** | hypothetical protein MGC2889 | 2 | **0** |
| **MGC3771** | hypothetical LOC81854 | 1 | **0** |
| **MGC39372** | serpin peptidase inhibitor, clade B (ovalbumin), member 9 pseudogene | 2 | **0** |
| **MIER3** | mesoderm induction early response 1, family member 3 | 7 | **0** |
| **MIPEPP3** | unknown | 2 | **0** |
| **MIR100HG** | mir-100-let-7a-2 cluster host gene (non-protein coding) | 4 | **0** |
| **MIR1267** | microRNA 1267 | 2 | **0** |
| **MIR210HG** | MIR210 host gene (non-protein coding) | 1 | **0** |
| **MIR568** | microRNA 568 | 2 | **0** |
| **MIS18BP1** | MIS18 binding protein 1 | 15 | **0** |
| **MITD1** | MIT, microtubule interacting and transport, domain containing 1 | 6 | **0** |
| **MKS1** | Meckel syndrome, type 1 | 18 | **0** |
| **MLLT4-AS1** | unknown | 2 | **0** |
| **MLX** | MAX-like protein X | 21 | **0** |
| **MNF1** | unknown | 7 | **0** |
| **MOCS3** | molybdenum cofactor synthesis 3 | 16 | **0** |

| | | | |
|---|---|---|---|
| **MORC2-AS1** | MORC2 antisense RNA 1 (non-protein coding) | 4 | **0** |
| **MORN1** | MORN repeat containing 1 | 5 | **0** |
| **MOV10L1** | Mov10l1, Moloney leukemia virus 10-like 1, homolog (mouse) | 8 | **0** |
| **MPHOSPH6** | M-phase phosphoprotein 6 | 16 | **0** |
| **MPI** | mannose phosphate isomerase | 24 | **0** |
| **MRPL15** | mitochondrial ribosomal protein L15 | 17 | **0** |
| **MRPL17** | mitochondrial ribosomal protein L17 | 14 | **0** |
| **MRPL18** | mitochondrial ribosomal protein L18 | 16 | **0** |
| **MRPL20** | mitochondrial ribosomal protein L20 | 17 | **0** |
| **MRPL22** | mitochondrial ribosomal protein L22 | 18 | **0** |
| **MRPL33** | mitochondrial ribosomal protein L33 | 9 | **0** |
| **MRPL45P2** | mitochondrial ribosomal protein L45 pseudogene 2 | 1 | **0** |
| **MRPL51** | mitochondrial ribosomal protein L51 | 11 | **0** |
| **MRPL53** | mitochondrial ribosomal protein L53 | 7 | **0** |
| **MRPS14** | mitochondrial ribosomal protein S14 | 12 | **0** |
| **MRPS16** | mitochondrial ribosomal protein S16 | 17 | **0** |
| **MRPS17** | mitochondrial ribosomal protein S17 | 15 | **0** |
| **MRPS21** | mitochondrial ribosomal protein S21 | 12 | **0** |
| **MRPS28** | mitochondrial ribosomal protein S28 | 15 | **0** |
| **MRPS33** | mitochondrial ribosomal protein S33 | 11 | **0** |
| **MT1L** | metallothionein 1L (gene/pseudogene) | 7 | **0** |
| **MTCP1NB** | mature T-cell proliferation 1 neighbor | 12 | **0** |
| **MTERF** | mitochondrial transcription termination factor | 24 | **0** |
| **MTERFD1** | MTERF domain containing 1 | 10 | **0** |
| **MTERFD2** | MTERF domain containing 2 | 7 | **0** |
| **MTFMT** | mitochondrial methionyl-tRNA formyltransferase | 6 | **0** |
| **MTMR10** | myotubularin related protein 10 | 7 | **0** |
| **MTMR12** | myotubularin related protein 12 | 10 | **0** |
| **MTMR7** | myotubularin related protein 7 | 9 | **0** |

| | | | |
|---|---|---|---|
| **MTO1** | mitochondrial translation optimization 1 homolog (S. cerevisiae) | 17 | **0** |
| **MTRF1L** | mitochondrial translational release factor 1-like | 14 | **0** |
| **MTRNR2L4** | MT-RNR2-like 4 | 4 | **0** |
| **MTRNR2L5** | MT-RNR2-like 5 | 4 | **0** |
| **MUTED** | muted homolog (mouse) | 15 | **0** |
| **MYCBP2** | MYC binding protein 2 | 29 | **0** |
| **MYEF2** | myelin expression factor 2 | 15 | **0** |
| **MYEOV2** | myeloma overexpressed 2 | 3 | **0** |
| **MYLPF** | myosin light chain, phosphorylatable, fast skeletal muscle | 7 | **0** |
| **MYO1B** | myosin IB | 17 | **0** |
| **MYO3B** | myosin IIIB | 7 | **0** |
| **MYO5C** | myosin VC | 12 | **0** |
| **MYOZ3** | myozenin 3 | 8 | **0** |
| **N4BP3** | NEDD4 binding protein 3 | 6 | **0** |
| **NAA11** | N(alpha)-acetyltransferase 11, NatA catalytic subunit | 7 | **0** |
| **NANP** | N-acetylneuraminic acid phosphatase | 8 | **0** |
| **NBPF15** | neuroblastoma breakpoint family, member 15 | 6 | **0** |
| **NCBP2** | nuclear cap binding protein subunit 2, 20kDa | 38 | **0** |
| **NDUFA8** | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 8, 19kDa | 22 | **0** |
| **NDUFB2** | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2, 8kDa | 11 | **0** |
| **NDUFS5** | NADH dehydrogenase (ubiquinone) Fe-S protein 5, 15kDa (NADH-coenzyme Q reductase) | 22 | **0** |
| **NEUROG1** | neurogenin 1 | 16 | **0** |
| **NEUROG2** | neurogenin 2 | 12 | **0** |
| **NHLRC2** | NHL repeat containing 2 | 6 | **0** |
| **NHSL1** | NHS-like 1 | 3 | **0** |
| **NOL9** | nucleolar protein 9 | 14 | **0** |
| **NRIP2** | nuclear receptor interacting protein 2 | 11 | **0** |
| **NSFP1** | N-ethylmaleimide-sensitive factor pseudogene 1 | 1 | **0** |
| **NSMCE2** | non-SMC element 2, MMS21 homolog (S. cerevisiae) | 22 | **0** |

| | | | |
|---|---|---|---|
| **NSRP1** | nuclear speckle splicing regulatory protein 1 | 14 | **0** |
| **NSUN6** | NOP2/Sun domain family, member 6 | 7 | **0** |
| **NSUN7** | NOP2/Sun domain family, member 7 | 4 | **0** |
| **NTAN1** | N-terminal asparagine amidase | 10 | **0** |
| **NUDCD2** | NudC domain containing 2 | 10 | **0** |
| **NUDCD3** | NudC domain containing 3 | 18 | **0** |
| **NUDT17** | nudix (nucleoside diphosphate linked moiety X)-type motif 17 | 4 | **0** |
| **NUDT3** | nudix (nucleoside diphosphate linked moiety X)-type motif 3 | 15 | **0** |
| **NUDT4** | nudix (nucleoside diphosphate linked moiety X)-type motif 4 | 10 | **0** |
| **NUP37** | nucleoporin 37kDa | 16 | **0** |
| **NUP85** | nucleoporin 85kDa | 25 | **0** |
| **NUP93** | nucleoporin 93kDa | 30 | **0** |
| **NUPL1** | nucleoporin like 1 | 15 | **0** |
| **NYNRIN** | NYN domain and retroviral integrase containing | 8 | **0** |
| **OAZ3** | ornithine decarboxylase antizyme 3 | 11 | **0** |
| **OCIAD1** | OCIA domain containing 1 | 14 | **0** |
| **OPA3** | optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia) | 25 | **0** |
| **ORC3** | origin recognition complex, subunit 3 | 39 | **0** |
| **OSGEPL1** | O-sialoglycoprotein endopeptidase-like 1 | 4 | **0** |
| **OTUD3** | OTU domain containing 3 | 9 | **0** |
| **OTUD6A** | OTU domain containing 6A | 2 | **0** |
| **PAICS** | phosphoribosylaminoimidazole carboxylase, phosphoribosylaminoimidazole succinocarboxamide synthetase | 28 | **0** |
| **PAIP1** | poly(A) binding protein interacting protein 1 | 15 | **0** |
| **PALM2** | paralemmin 2 | 12 | **0** |
| **PALMD** | palmdelphin | 9 | **0** |
| **PAN3** | PAN3 poly(A) specific ribonuclease subunit homolog (S. cerevisiae) | 12 | **0** |
| **PAN3-AS1** | PAN3 antisense RNA 1 (non-protein coding) | 1 | **0** |
| **PAPD4** | PAP associated domain containing 4 | 9 | **0** |

| | | | |
|---|---|---|---|
| **PARPBP** | unknown | 10 | **0** |
| **PCBP1-AS1** | unknown | 2 | **0** |
| **PCID2** | PCI domain containing 2 | 19 | **0** |
| **PCMTD2** | protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 2 | 8 | **0** |
| **PDAP1** | PDGFA associated protein 1 | 11 | **0** |
| **PDCL3** | phosducin-like 3 | 10 | **0** |
| **PDE6D** | phosphodiesterase 6D, cGMP-specific, rod, delta | 18 | **0** |
| **PDP1** | pyruvate dehyrogenase phosphatase catalytic subunit 1 | 24 | **0** |
| **PDP2** | pyruvate dehyrogenase phosphatase catalytic subunit 2 | 13 | **0** |
| **PDXDC2P** | pyridoxal-dependent decarboxylase domain containing 2, pseudogene | 2 | **0** |
| **PDZD7** | PDZ domain containing 7 | 9 | **0** |
| **PEX1** | peroxisomal biogenesis factor 1 | 37 | **0** |
| **PGBD3** | piggyBac transposable element derived 3 | 5 | **0** |
| **PGM2L1** | phosphoglucomutase 2-like 1 | 8 | **0** |
| **PGPEP1** | pyroglutamyl-peptidase I | 10 | **0** |
| **PHF14** | PHD finger protein 14 | 15 | **0** |
| **PHF2** | PHD finger protein 2 | 10 | **0** |
| **PHF21A** | PHD finger protein 21A | 18 | **0** |
| **PHKA1** | phosphorylase kinase, alpha 1 (muscle) | 18 | **0** |
| **PHKB** | phosphorylase kinase, beta | 17 | **0** |
| **PHKG1** | phosphorylase kinase, gamma 1 (muscle) | 25 | **0** |
| **PHOSPHO1** | phosphatase, orphan 1 | 9 | **0** |
| **PIEZO2** | unknown | 7 | **0** |
| **PIK3R5** | phosphoinositide-3-kinase, regulatory subunit 5 | 17 | **0** |
| **PIP5K1A** | phosphatidylinositol-4-phosphate 5-kinase, type I, alpha | 38 | **0** |
| **PITPNB** | phosphatidylinositol transfer protein, beta | 17 | **0** |
| **PKIA** | protein kinase (cAMP-dependent, catalytic) inhibitor alpha | 18 | **0** |
| **PLEKHG1** | pleckstrin homology domain containing, family G (with RhoGef domain) member 1 | 9 | **0** |
| **PLGRKT** | unknown | 14 | **0** |

| | | | |
|---|---|---|---|
| **PLK1S1** | polo-like kinase 1 substrate 1 | 3 | **0** |
| **PLSCR4** | phospholipid scramblase 4 | 12 | **0** |
| **PNMAL1** | PNMA-like 1 | 12 | **0** |
| **PNO1** | partner of NOB1 homolog (S. cerevisiae) | 11 | **0** |
| **PNRC2** | proline-rich nuclear receptor coactivator 2 | 14 | **0** |
| **POLD3** | polymerase (DNA-directed), delta 3, accessory subunit | 33 | **0** |
| **POLR3C** | polymerase (RNA) III (DNA directed) polypeptide C (62kD) | 18 | **0** |
| **POLR3E** | polymerase (RNA) III (DNA directed) polypeptide E (80kD) | 17 | **0** |
| **POLR3K** | polymerase (RNA) III (DNA directed) polypeptide K, 12.3 kDa | 12 | **0** |
| **POM121L8P** | POM121 membrane glycoprotein-like 8 pseudogene | 5 | **0** |
| **POM121L9P** | POM121 membrane glycoprotein-like 9, pseudogene | 7 | **0** |
| **POP5** | processing of precursor 5, ribonuclease P/MRP subunit (S. cerevisiae) | 12 | **0** |
| **POU6F1** | POU class 6 homeobox 1 | 13 | **0** |
| **PPIH** | peptidylprolyl isomerase H (cyclophilin H) | 16 | **0** |
| **PPP1R2** | protein phosphatase 1, regulatory (inhibitor) subunit 2 | 26 | **0** |
| **PPP1R37** | unknown | 4 | **0** |
| **PPWD1** | peptidylprolyl isomerase domain and WD repeat containing 1 | 10 | **0** |
| **PRDM6** | PR domain containing 6 | 1 | **0** |
| **PRICKLE3** | prickle homolog 3 (Drosophila) | 10 | **0** |
| **ProSAPiP1** | ProSAPiP1 protein | 5 | **0** |
| **PRPF18** | PRP18 pre-mRNA processing factor 18 homolog (S. cerevisiae) | 11 | **0** |
| **PRPSAP1** | phosphoribosyl pyrophosphate synthetase-associated protein 1 | 15 | **0** |
| **PRR11** | proline rich 11 | 12 | **0** |
| **PRR23C** | proline rich 23C | 1 | **0** |
| **PSMB6** | proteasome (prosome, macropain) subunit, beta type, 6 | 47 | **0** |
| **PTCD2** | pentatricopeptide repeat domain 2 | 5 | **0** |
| **PTGR2** | prostaglandin reductase 2 | 11 | **0** |
| **PTPDC1** | protein tyrosine phosphatase domain containing 1 | 3 | **0** |
| **PTRF** | polymerase I and transcript release factor | 28 | **0** |

| | | | |
|---|---|---|---|
| **PTRHD1** | peptidyl-tRNA hydrolase domain containing 1 | 3 | **0** |
| **PUS3** | pseudouridylate synthase 3 | 5 | **0** |
| **PWWP2B** | PWWP domain containing 2B | 5 | **0** |
| **PXDC1** | unknown | 2 | **0** |
| **PYCRL** | pyrroline-5-carboxylate reductase-like | 10 | **0** |
| **QRICH2** | glutamine rich 2 | 3 | **0** |
| **R3HCC1** | R3H domain and coiled-coil containing 1 | 2 | **0** |
| **RAB21** | RAB21, member RAS oncogene family | 17 | **0** |
| **RAB8B** | RAB8B, member RAS oncogene family | 15 | **0** |
| **RABL2A** | RAB, member of RAS oncogene family-like 2A | 8 | **0** |
| **RAD54L2** | RAD54-like 2 (S. cerevisiae) | 15 | **0** |
| **RAI2** | retinoic acid induced 2 | 10 | **0** |
| **RANBP10** | RAN binding protein 10 | 11 | **0** |
| **RAPGEFL1** | Rap guanine nucleotide exchange factor (GEF)-like 1 | 3 | **0** |
| **RASA4** | RAS p21 protein activator 4 | 11 | **0** |
| **RAX2** | retina and anterior neural fold homeobox 2 | 3 | **0** |
| **RBFA** | ribosome binding factor A (putative) | 5 | **0** |
| **RBM12B** | RNA binding motif protein 12B | 7 | **0** |
| **RBM15** | RNA binding motif protein 15 | 23 | **0** |
| **RBM28** | RNA binding motif protein 28 | 20 | **0** |
| **RBM43** | RNA binding motif protein 43 | 5 | **0** |
| **RBP7** | retinol binding protein 7, cellular | 5 | **0** |
| **REP15** | RAB15 effector protein | 2 | **0** |
| **REXO1L1** | REX1, RNA exonuclease 1 homolog (S. cerevisiae)-like 1 | 5 | **0** |
| **RFPL3-AS1** | RFPL3 antisense RNA 1 (non-protein coding) | 2 | **0** |
| **RFXAP** | regulatory factor X-associated protein | 21 | **0** |
| **RGP1** | RGP1 retrograde golgi transport homolog (S. cerevisiae) | 6 | **0** |
| **RHPN1** | rhophilin, Rho GTPase binding protein 1 | 7 | **0** |
| **RILPL1** | Rab interacting lysosomal protein-like 1 | 5 | **0** |

| | | | |
|---|---|---|---|
| **RIMKLA** | ribosomal modification protein rimK-like family member A | 7 | **0** |
| **RIMKLB** | ribosomal modification protein rimK-like family member B | 9 | **0** |
| **RMI1** | RMI1, RecQ mediated genome instability 1, homolog (S. cerevisiae) | 29 | **0** |
| **RMI2** | RMI2, RecQ mediated genome instability 2, homolog (S. cerevisiae) | 12 | **0** |
| **RNF113B** | ring finger protein 113B | 5 | **0** |
| **RNF126P1** | ring finger protein 126 pseudogene 1 | 1 | **0** |
| **RNF32** | ring finger protein 32 | 12 | **0** |
| **RNF44** | ring finger protein 44 | 7 | **0** |
| **RNU6-1** | RNA, U6 small nuclear 1 | 4 | **0** |
| **RNU6-2** | RNA, U6 small nuclear 2 | 3 | **0** |
| **RNY1** | RNA, Ro-associated Y1 | 3 | **0** |
| **RNY3** | RNA, Ro-associated Y3 | 3 | **0** |
| **ROCK1P1** | Rho-associated, coiled-coil containing protein kinase 1 pseudogene 1 | 3 | **0** |
| **RPAIN** | RPA interacting protein | 14 | **0** |
| **RPAP1** | RNA polymerase II associated protein 1 | 11 | **0** |
| **RPF2** | ribosome production factor 2 homolog (S. cerevisiae) | 12 | **0** |
| **RPL13AP17** | ribosomal protein L13a pseudogene 17 | 4 | **0** |
| **RPL13AP20** | ribosomal protein L13a pseudogene 20 | 2 | **0** |
| **RPL13AP5** | ribosomal protein L13a pseudogene 5 | 1 | **0** |
| **RPL23AP32** | ribosomal protein L23a pseudogene 32 | 2 | **0** |
| **RPL23AP53** | ribosomal protein L23a pseudogene 53 | 3 | **0** |
| **RPL23AP7** | ribosomal protein L23a pseudogene 7 | 6 | **0** |
| **RPL26L1** | ribosomal protein L26-like 1 | 8 | **0** |
| **RPL27** | ribosomal protein L27 | 22 | **0** |
| **RPL31P11** | ribosomal protein L31 pseudogene 11 | 2 | **0** |
| **RPL7** | ribosomal protein L7 | 46 | **0** |
| **RPL7L1** | ribosomal protein L7-like 1 | 9 | **0** |
| **RPLP0P2** | ribosomal protein, large, P0 pseudogene 2 | 5 | **0** |
| **RPP14** | ribonuclease P/MRP 14kDa subunit | 16 | **0** |

| | | | |
|---|---|---|---|
| **RPS10P7** | ribosomal protein S10 pseudogene 7 | 3 | **0** |
| **RPS16P5** | ribosomal protein S16 pseudogene 5 | 2 | **0** |
| **RPSAP9** | ribosomal protein SA pseudogene 9 | 3 | **0** |
| **RRP15** | ribosomal RNA processing 15 homolog (S. cerevisiae) | 14 | **0** |
| **RRP7B** | ribosomal RNA processing 7 homolog B (S. cerevisiae) | 3 | **0** |
| **RSPH1** | radial spoke head 1 homolog (Chlamydomonas) | 7 | **0** |
| **RSPH9** | radial spoke head 9 homolog (Chlamydomonas) | 7 | **0** |
| **RUFY3** | RUN and FYVE domain containing 3 | 9 | **0** |
| **RWDD2A** | RWD domain containing 2A | 4 | **0** |
| **SAC3D1** | SAC3 domain containing 1 | 9 | **0** |
| **SAP18** | Sin3A-associated protein, 18kDa | 30 | **0** |
| **SAP25** | Sin3A-associated protein, 25kDa | 4 | **0** |
| **SAR1A** | SAR1 homolog A (S. cerevisiae) | 23 | **0** |
| **SAYSD1** | unknown | 7 | **0** |
| **SBDSP1** | Shwachman-Bodian-Diamond syndrome pseudogene 1 | 7 | **0** |
| **SCFD2** | sec1 family domain containing 2 | 9 | **0** |
| **SCNM1** | sodium channel modifier 1 | 9 | **0** |
| **SDHAP1** | succinate dehydrogenase complex, subunit A, flavoprotein pseudogene 1 | 2 | **0** |
| **SDR16C5** | short chain dehydrogenase/reductase family 16C, member 5 | 11 | **0** |
| **SEPSECS** | Sep (O-phosphoserine) tRNA:Sec (selenocysteine) tRNA synthase | 15 | **0** |
| **SETD6** | SET domain containing 6 | 10 | **0** |
| **SF3A3** | splicing factor 3a, subunit 3, 60kDa | 35 | **0** |
| **SF3B3** | splicing factor 3b, subunit 3, 130kDa | 44 | **0** |
| **SGTB** | small glutamine-rich tetratricopeptide repeat (TPR)-containing, beta | 9 | **0** |
| **SH3BP5** | SH3-domain binding protein 5 (BTK-associated) | 18 | **0** |
| **SH3TC2** | SH3 domain and tetratricopeptide repeats 2 | 19 | **0** |
| **SHANK2-AS3** | SHANK2 antisense RNA 3 (non-protein coding) | 2 | **0** |
| **SIGLEC16** | sialic acid binding Ig-like lectin 16 (gene/pseudogene) | 6 | **0** |
| **SIKE1** | suppressor of IKBKE 1 | 10 | **0** |

| | | | |
|---|---|---|---|
| **SKA1** | spindle and kinetochore associated complex subunit 1 | 10 | **0** |
| **SKA3** | spindle and kinetochore associated complex subunit 3 | 19 | **0** |
| **SLC25A5-AS1** | unknown | 3 | **0** |
| **SLC4A1AP** | solute carrier family 4 (anion exchanger), member 1, adaptor protein | 22 | **0** |
| **SLC52A1** | unknown | 8 | **0** |
| **SLFN12** | schlafen family member 12 | 4 | **0** |
| **SLMO2** | slowmo homolog 2 (Drosophila) | 7 | **0** |
| **SLTM** | SAFB-like, transcription modulator | 10 | **0** |
| **SMA4** | glucuronidase, beta pseudogene | 5 | **0** |
| **SMAP1** | small ArfGAP 1 | 14 | **0** |
| **SMC6** | structural maintenance of chromosomes 6 | 24 | **0** |
| **SNAP29** | synaptosomal-associated protein, 29kDa | 26 | **0** |
| **SNHG3** | small nucleolar RNA host gene 3 (non-protein coding) | 4 | **0** |
| **SNORA31** | small nucleolar RNA, H/ACA box 31 | 3 | **0** |
| **SNORA52** | small nucleolar RNA, H/ACA box 52 | 4 | **0** |
| **SNORA58** | small nucleolar RNA, H/ACA box 58 | 3 | **0** |
| **SNORD14B** | small nucleolar RNA, C/D box 14B | 2 | **0** |
| **SNRNP35** | small nuclear ribonucleoprotein 35kDa (U11/U12) | 9 | **0** |
| **SNRNP48** | small nuclear ribonucleoprotein 48kDa (U11/U12) | 8 | **0** |
| **SNRPA1** | small nuclear ribonucleoprotein polypeptide A' | 36 | **0** |
| **SNRPD3** | small nuclear ribonucleoprotein D3 polypeptide 18kDa | 52 | **0** |
| **SNX16** | sorting nexin 16 | 11 | **0** |
| **SNX22** | sorting nexin 22 | 6 | **0** |
| **SNX24** | sorting nexin 24 | 9 | **0** |
| **SNX30** | sorting nexin family member 30 | 4 | **0** |
| **SNX4** | sorting nexin 4 | 15 | **0** |
| **SORBS1** | sorbin and SH3 domain containing 1 | 47 | **0** |
| **SPAG16** | sperm associated antigen 16 | 10 | **0** |
| **SPATS1** | spermatogenesis associated, serine-rich 1 | 2 | **0** |

| | | | |
|---|---|---|---|
| **SPATS2** | spermatogenesis associated, serine-rich 2 | 7 | **0** |
| **SPDYE2L** | WBSCR19-like protein 3 | 1 | **0** |
| **SPDYE5** | speedy homolog E5 (Xenopus laevis) | 1 | **0** |
| **SPDYE8P** | speedy homolog E8 (Xenopus laevis), pseudogene | 1 | **0** |
| **SPG21** | spastic paraplegia 21 (autosomal recessive, Mast syndrome) | 16 | **0** |
| **SPHAR** | S-phase response (cyclin related) | 3 | **0** |
| **SPIC** | Spi-C transcription factor (Spi-1/PU.1 related) | 4 | **0** |
| **SPIRE1** | spire homolog 1 (Drosophila) | 11 | **0** |
| **SPIRE2** | spire homolog 2 (Drosophila) | 4 | **0** |
| **SRFBP1** | serum response factor binding protein 1 | 8 | **0** |
| **SRSF12** | serine/arginine-rich splicing factor 12 | 6 | **0** |
| **SS18L2** | synovial sarcoma translocation gene on chromosome 18-like 2 | 4 | **0** |
| **STAC** | SH3 and cysteine rich domain | 5 | **0** |
| **STAG3L1** | stromal antigen 3-like 1 | 4 | **0** |
| **STK36** | serine/threonine kinase 36 | 17 | **0** |
| **STK4-AS1** | unknown | 1 | **0** |
| **STON2** | stonin 2 | 14 | **0** |
| **SULT1C4** | sulfotransferase family, cytosolic, 1C, member 4 | 9 | **0** |
| **SUN3** | Sad1 and UNC84 domain containing 3 | 5 | **0** |
| **SWSAP1** | unknown | 3 | **0** |
| **SYDE2** | synapse defective 1, Rho GTPase, homolog 2 (C. elegans) | 2 | **0** |
| **SYNC** | syncoilin, intermediate filament protein | 8 | **0** |
| **SYNPO2L** | synaptopodin 2-like | 5 | **0** |
| **TBC1D23** | TBC1 domain family, member 23 | 5 | **0** |
| **TBC1D30** | TBC1 domain family, member 30 | 6 | **0** |
| **TBC1D8B** | TBC1 domain family, member 8B (with GRAM domain) | 7 | **0** |
| **TCF19** | transcription factor 19 | 16 | **0** |
| **TCTEX1D1** | Tctex1 domain containing 1 | 3 | **0** |
| **TCTEX1D2** | Tctex1 domain containing 2 | 3 | **0** |

| | | | |
|---|---|---|---|
| **TCTN2** | tectonic family member 2 | 7 | **0** |
| **TDP1** | tyrosyl-DNA phosphodiesterase 1 | 46 | **0** |
| **TDRD3** | tudor domain containing 3 | 14 | **0** |
| **TECPR1** | tectonin beta-propeller repeat containing 1 | 6 | **0** |
| **TEFM** | unknown | 12 | **0** |
| **TEKT4P2** | tektin 4 pseudogene 2 | 8 | **0** |
| **TFB1M** | transcription factor B1, mitochondrial | 21 | **0** |
| **THAP2** | THAP domain containing, apoptosis associated protein 2 | 11 | **0** |
| **THAP6** | THAP domain containing 6 | 10 | **0** |
| **THNSL1** | threonine synthase-like 1 (S. cerevisiae) | 9 | **0** |
| **THRAP3** | thyroid hormone receptor associated protein 3 | 37 | **0** |
| **THUMPD2** | THUMP domain containing 2 | 8 | **0** |
| **THUMPD3** | THUMP domain containing 3 | 7 | **0** |
| **TIMM9** | translocase of inner mitochondrial membrane 9 homolog (yeast) | 13 | **0** |
| **TMED10P1** | transmembrane emp24-like trafficking protein 10 (yeast) pseudogene 1 | 2 | **0** |
| **TMEM241** | unknown | 4 | **0** |
| **TMEM246** | unknown | 6 | **0** |
| **TNRC6C** | trinucleotide repeat containing 6C | 12 | **0** |
| **TOB2P1** | transducer of ERBB2, 2 pseudogene 1 | 1 | **0** |
| **TOP1P2** | topoisomerase (DNA) I pseudogene 2 | 1 | **0** |
| **TOX4** | TOX high mobility group box family member 4 | 15 | **0** |
| **TPI1P2** | triosephosphate isomerase 1 pseudogene 2 | 6 | **0** |
| **TPI1P3** | triosephosphate isomerase 1 pseudogene 3 | 1 | **0** |
| **TPTE2P1** | transmembrane phosphoinositide 3-phosphatase and tensin homolog 2 pseudogene 1 | 1 | **0** |
| **TRAPPC2L** | trafficking protein particle complex 2-like | 8 | **0** |
| **TRIM15** | tripartite motif containing 15 | 15 | **0** |
| **TRIM34** | tripartite motif containing 34 | 11 | **0** |
| **TRIM41** | tripartite motif containing 41 | 15 | **0** |
| **TRIM5** | tripartite motif containing 5 | 97 | **0** |

| | | | |
|---|---|---|---|
| **TRIM52** | tripartite motif containing 52 | 5 | **0** |
| **TRIM60** | tripartite motif containing 60 | 5 | **0** |
| **TRIM7** | tripartite motif containing 7 | 9 | **0** |
| **TRMT112** | tRNA methyltransferase 11-2 homolog (S. cerevisiae) | 13 | **0** |
| **TSC22D1-AS1** | unknown | 1 | **0** |
| **TTC1** | tetratricopeptide repeat domain 1 | 16 | **0** |
| **TTC17** | tetratricopeptide repeat domain 17 | 8 | **0** |
| **TTC39C** | tetratricopeptide repeat domain 39C | 4 | **0** |
| **TUBGCP3** | tubulin, gamma complex associated protein 3 | 21 | **0** |
| **TULP3** | tubby like protein 3 | 11 | **0** |
| **TULP4** | tubby like protein 4 | 9 | **0** |
| **TXLNB** | taxilin beta | 14 | **0** |
| **TXNL4B** | thioredoxin-like 4B | 13 | **0** |
| **TYSND1** | trypsin domain containing 1 | 7 | **0** |
| **UBE2D4** | ubiquitin-conjugating enzyme E2D 4 (putative) | 11 | **0** |
| **UBE2E3** | ubiquitin-conjugating enzyme E2E 3 | 34 | **0** |
| **UBE2O** | ubiquitin-conjugating enzyme E2O | 19 | **0** |
| **UBE3D** | unknown | 3 | **0** |
| **UBL5** | ubiquitin-like 5 | 18 | **0** |
| **UCKL1-AS1** | UCKL1 antisense RNA 1 (non-protein coding) | 2 | **0** |
| **UNC13A** | unc-13 homolog A (C. elegans) | 14 | **0** |
| **URGCP-MRPS24** | URGCP-MRPS24 readthrough | 2 | **0** |
| **USP29** | ubiquitin specific peptidase 29 | 5 | **0** |
| **USP32P2** | unknown | 3 | **0** |
| **USP37** | ubiquitin specific peptidase 37 | 21 | **0** |
| **USP41** | ubiquitin specific peptidase 41 | 3 | **0** |
| **USP6NL** | USP6 N-terminal like | 19 | **0** |
| **UTP15** | UTP15, U3 small nucleolar ribonucleoprotein, homolog (S. cerevisiae) | 13 | **0** |
| **VDAC3** | voltage-dependent anion channel 3 | 33 | **0** |

| | | | |
|---|---|---|---|
| **VPS54** | vacuolar protein sorting 54 homolog (S. cerevisiae) | 12 | **0** |
| **VWA2** | von Willebrand factor A domain containing 2 | 8 | **0** |
| **VWA3A** | von Willebrand factor A domain containing 3A | 4 | **0** |
| **VWA5B2** | von Willebrand factor A domain containing 5B2 | 3 | **0** |
| **WDFY2** | WD repeat and FYVE domain containing 2 | 8 | **0** |
| **WDR12** | WD repeat domain 12 | 19 | **0** |
| **WDR19** | WD repeat domain 19 | 9 | **0** |
| **WDR43** | WD repeat domain 43 | 18 | **0** |
| **WDR53** | WD repeat domain 53 | 4 | **0** |
| **WDR70** | WD repeat domain 70 | 4 | **0** |
| **WDR81** | WD repeat domain 81 | 8 | **0** |
| **WDR83OS** | unknown | 5 | **0** |
| **WDR89** | WD repeat domain 89 | 10 | **0** |
| **WDSUB1** | WD repeat, sterile alpha motif and U-box domain containing 1 | 6 | **0** |
| **WIPF3** | WAS/WASL interacting protein family, member 3 | 8 | **0** |
| **WSB2** | WD repeat and SOCS box containing 2 | 12 | **0** |
| **WWC3** | WWC family member 3 | 5 | **0** |
| **XRRA1** | X-ray radiation resistance associated 1 | 6 | **0** |
| **YAE1D1** | unknown | 8 | **0** |
| **ZBTB10** | zinc finger and BTB domain containing 10 | 10 | **0** |
| **ZBTB2** | zinc finger and BTB domain containing 2 | 14 | **0** |
| **ZBTB25** | zinc finger and BTB domain containing 25 | 10 | **0** |
| **ZBTB3** | zinc finger and BTB domain containing 3 | 6 | **0** |
| **ZBTB8OS** | zinc finger and BTB domain containing 8 opposite strand | 4 | **0** |
| **ZC3H4** | zinc finger CCCH-type containing 4 | 13 | **0** |
| **ZCCHC10** | zinc finger, CCHC domain containing 10 | 6 | **0** |
| **ZCCHC17** | zinc finger, CCHC domain containing 17 | 10 | **0** |
| **ZCRB1** | zinc finger CCHC-type and RNA binding motif 1 | 6 | **0** |
| **ZDHHC8P1** | zinc finger, DHHC-type containing 8 pseudogene 1 | 5 | **0** |

| | | | |
|---|---|---|---|
| **ZEB1-AS1** | ZEB1 antisense RNA 1 (non-protein coding) | 2 | **0** |
| **ZFAND2A** | zinc finger, AN1-type domain 2A | 4 | **0** |
| **ZFP14** | zinc finger protein 14 homolog (mouse) | 3 | **0** |
| **ZFP161** | zinc finger protein 161 homolog (mouse) | 17 | **0** |
| **ZFP30** | zinc finger protein 30 homolog (mouse) | 7 | **0** |
| **ZFP37** | zinc finger protein 37 homolog (mouse) | 3 | **0** |
| **ZFP64** | zinc finger protein 64 homolog (mouse) | 13 | **0** |
| **ZFP90** | zinc finger protein 90 homolog (mouse) | 12 | **0** |
| **ZFYVE20** | zinc finger, FYVE domain containing 20 | 15 | **0** |
| **ZFYVE28** | zinc finger, FYVE domain containing 28 | 8 | **0** |
| **ZKSCAN2** | zinc finger with KRAB and SCAN domains 2 | 3 | **0** |
| **ZMYM1** | zinc finger, MYM-type 1 | 8 | **0** |
| **ZMYM4** | zinc finger, MYM-type 4 | 16 | **0** |
| **ZMYND15** | zinc finger, MYND-type containing 15 | 2 | **0** |
| **ZNF114** | zinc finger protein 114 | 2 | **0** |
| **ZNF117** | zinc finger protein 117 | 6 | **0** |
| **ZNF17** | zinc finger protein 17 | 8 | **0** |
| **ZNF187** | zinc finger protein 187 | 4 | **0** |
| **ZNF211** | zinc finger protein 211 | 5 | **0** |
| **ZNF22** | zinc finger protein 22 (KOX 15) | 12 | **0** |
| **ZNF226** | zinc finger protein 226 | 8 | **0** |
| **ZNF234** | zinc finger protein 234 | 6 | **0** |
| **ZNF248** | zinc finger protein 248 | 4 | **0** |
| **ZNF252P** | unknown | 3 | **0** |
| **ZNF254** | zinc finger protein 254 | 5 | **0** |
| **ZNF260** | zinc finger protein 260 | 8 | **0** |
| **ZNF286B** | zinc finger protein 286B | 3 | **0** |
| **ZNF30** | zinc finger protein 30 | 3 | **0** |
| **ZNF300P1** | zinc finger protein 300 pseudogene 1 | 2 | **0** |

| | | | |
|---|---|---|---|
| **ZNF304** | zinc finger protein 304 | 3 | **0** |
| **ZNF319** | zinc finger protein 319 | 5 | **0** |
| **ZNF323** | zinc finger protein 323 | 10 | **0** |
| **ZNF324** | zinc finger protein 324 | 6 | **0** |
| **ZNF333** | zinc finger protein 333 | 5 | **0** |
| **ZNF337** | zinc finger protein 337 | 6 | **0** |
| **ZNF34** | zinc finger protein 34 | 10 | **0** |
| **ZNF347** | zinc finger protein 347 | 4 | **0** |
| **ZNF354B** | zinc finger protein 354B | 3 | **0** |
| **ZNF416** | zinc finger protein 416 | 3 | **0** |
| **ZNF417** | zinc finger protein 417 | 4 | **0** |
| **ZNF418** | zinc finger protein 418 | 7 | **0** |
| **ZNF425** | zinc finger protein 425 | 4 | **0** |
| **ZNF430** | zinc finger protein 430 | 4 | **0** |
| **ZNF431** | zinc finger protein 431 | 5 | **0** |
| **ZNF434** | zinc finger protein 434 | 5 | **0** |
| **ZNF436** | zinc finger protein 436 | 10 | **0** |
| **ZNF440** | zinc finger protein 440 | 8 | **0** |
| **ZNF454** | zinc finger protein 454 | 4 | **0** |
| **ZNF468** | zinc finger protein 468 | 4 | **0** |
| **ZNF469** | zinc finger protein 469 | 8 | **0** |
| **ZNF484** | zinc finger protein 484 | 6 | **0** |
| **ZNF492** | zinc finger protein 492 | 7 | **0** |
| **ZNF498** | zinc finger protein 498 | 6 | **0** |
| **ZNF502** | zinc finger protein 502 | 5 | **0** |
| **ZNF543** | zinc finger protein 543 | 2 | **0** |
| **ZNF551** | zinc finger protein 551 | 6 | **0** |
| **ZNF563** | zinc finger protein 563 | 5 | **0** |
| **ZNF565** | zinc finger protein 565 | 4 | **0** |

| | | | |
|---|---|---|---|
| **ZNF568** | zinc finger protein 568 | 4 | **0** |
| **ZNF571** | zinc finger protein 571 | 9 | **0** |
| **ZNF576** | zinc finger protein 576 | 5 | **0** |
| **ZNF578** | zinc finger protein 578 | 2 | **0** |
| **ZNF583** | zinc finger protein 583 | 5 | **0** |
| **ZNF584** | zinc finger protein 584 | 4 | **0** |
| **ZNF585A** | zinc finger protein 585A | 3 | **0** |
| **ZNF586** | zinc finger protein 586 | 5 | **0** |
| **ZNF587** | zinc finger protein 587 | 7 | **0** |
| **ZNF587B** | unknown | 3 | **0** |
| **ZNF594** | zinc finger protein 594 | 6 | **0** |
| **ZNF600** | zinc finger protein 600 | 4 | **0** |
| **ZNF610** | zinc finger protein 610 | 5 | **0** |
| **ZNF614** | zinc finger protein 614 | 4 | **0** |
| **ZNF621** | zinc finger protein 621 | 4 | **0** |
| **ZNF625** | zinc finger protein 625 | 3 | **0** |
| **ZNF625-ZNF20** | ZNF625-ZNF20 readthrough | 2 | **0** |
| **ZNF626** | zinc finger protein 626 | 1 | **0** |
| **ZNF629** | zinc finger protein 629 | 5 | **0** |
| **ZNF630** | zinc finger protein 630 | 4 | **0** |
| **ZNF654** | zinc finger protein 654 | 1 | **0** |
| **ZNF660** | zinc finger protein 660 | 3 | **0** |
| **ZNF662** | zinc finger protein 662 | 2 | **0** |
| **ZNF674** | zinc finger protein 674 | 3 | **0** |
| **ZNF684** | zinc finger protein 684 | 4 | **0** |
| **ZNF695** | zinc finger protein 695 | 5 | **0** |
| **ZNF700** | zinc finger protein 700 | 2 | **0** |
| **ZNF701** | zinc finger protein 701 | 4 | **0** |
| **ZNF707** | zinc finger protein 707 | 8 | **0** |

| | | | |
|---|---|---|---|
| **ZNF708** | zinc finger protein 708 | 5 | **0** |
| **ZNF710** | zinc finger protein 710 | 4 | **0** |
| **ZNF716** | zinc finger protein 716 | 2 | **0** |
| **ZNF720** | zinc finger protein 720 | 3 | **0** |
| **ZNF738** | zinc finger protein 738 | 4 | **0** |
| **ZNF75A** | zinc finger protein 75a | 6 | **0** |
| **ZNF763** | zinc finger protein 763 | 4 | **0** |
| **ZNF765** | zinc finger protein 765 | 2 | **0** |
| **ZNF766** | zinc finger protein 766 | 3 | **0** |
| **ZNF772** | zinc finger protein 772 | 2 | **0** |
| **ZNF777** | zinc finger protein 777 | 4 | **0** |
| **ZNF785** | zinc finger protein 785 | 5 | **0** |
| **ZNF791** | zinc finger protein 791 | 3 | **0** |
| **ZNF80** | zinc finger protein 80 | 4 | **0** |
| **ZNF813** | zinc finger protein 813 | 3 | **0** |
| **ZNF814** | zinc finger protein 814 | 4 | **0** |
| **ZNF829** | zinc finger protein 829 | 3 | **0** |
| **ZNF83** | zinc finger protein 83 | 10 | **0** |
| **ZNF836** | zinc finger protein 836 | 1 | **0** |
| **ZNF860** | zinc finger protein 860 | 1 | **0** |
| **ZNF93** | zinc finger protein 93 | 9 | **0** |
| **ZNHIT2** | zinc finger, HIT-type containing 2 | 11 | **0** |
| **ZNHIT3** | zinc finger, HIT-type containing 3 | 11 | **0** |
| **ZSCAN12** | zinc finger and SCAN domain containing 12 | 6 | **0** |
| **ZSCAN12P1** | zinc finger and SCAN domain containing 12 pseudogene 1 | 2 | **0** |
| **ZSCAN16** | zinc finger and SCAN domain containing 16 | 8 | **0** |
| **ZSCAN30** | zinc finger and SCAN domain containing 30 | 3 | **0** |
| **ZSCAN4** | zinc finger and SCAN domain containing 4 | 6 | **0** |
| **ZSWIM3** | zinc finger, SWIM-type containing 3 | 6 | **0** |

| | | | |
|---|---|---|---|
| **ZSWIM5** | zinc finger, SWIM-type containing 5 | 6 | **0** |
| **ZUFSP** | zinc finger with UFM1-specific peptidase domain | 9 | **0** |
| **ZXDC** | ZXD family zinc finger C | 12 | **0** |

**Appendix Table A.3.5.1.** A table of AngioScore for the full 3,069 differentially expressed genes. The 698 genes at the top of the table are the VT's predicted to have a transmembrane or signal peptide domain.