

Correlation Analysis: revealed 1170 genes with $|R2| > 0.5$ and $P < 0.05$ that were thought to be rela

| gene_name | gene_id | gene_biot | cor_spear | p_spearman |
|-----------|----------|------------|-----------|------------|
| PKP3 | ENSG0000 | protein_co | -0.59655 | 0 |
| SYNE4 | ENSG0000 | protein_co | -0.56635 | 0 |
| PPP1R14B | ENSG0000 | protein_co | -0.56041 | 0 |
| FAM71E1 | ENSG0000 | protein_co | -0.55717 | 0 |
| ZMYND19 | ENSG0000 | protein_co | -0.53856 | 0 |
| PTRH2 | ENSG0000 | protein_co | -0.52872 | 0 |
| POLR1C | ENSG0000 | protein_co | -0.52634 | 0 |
| IPO4 | ENSG0000 | protein_co | -0.52546 | 0 |
| CACFD1 | ENSG0000 | protein_co | -0.52539 | 0 |
| METTL1 | ENSG0000 | protein_co | -0.52041 | 0 |
| NIT2 | ENSG0000 | protein_co | -0.51954 | 0 |
| RRP9 | ENSG0000 | protein_co | -0.51938 | 0 |
| TEDC2 | ENSG0000 | protein_co | -0.51891 | 0 |
| PDCD2L | ENSG0000 | protein_co | -0.51776 | 0 |
| TOMM40 | ENSG0000 | protein_co | -0.51624 | 0 |
| SRM | ENSG0000 | protein_co | -0.51595 | 0 |
| NME1 | ENSG0000 | protein_co | -0.51436 | 0 |
| RHPN1 | ENSG0000 | protein_co | -0.51414 | 0 |
| FLAD1 | ENSG0000 | protein_co | -0.51385 | 0 |
| MRTO4 | ENSG0000 | protein_co | -0.51287 | 0 |
| SLC25A33 | ENSG0000 | protein_co | -0.51157 | 0 |
| SLC25A10 | ENSG0000 | protein_co | -0.51123 | 0 |
| SLC25A22 | ENSG0000 | protein_co | -0.51115 | 0 |
| SLC25A39 | ENSG0000 | protein_co | -0.50705 | 0 |
| PYCR3 | ENSG0000 | protein_co | -0.5065 | 0 |
| TRAF4 | ENSG0000 | protein_co | -0.50357 | 0 |
| AP1M2 | ENSG0000 | protein_co | -0.50341 | 0 |
| POLD2 | ENSG0000 | protein_co | -0.5006 | 0 |
| TSPAN7 | ENSG0000 | protein_co | 0.50002 | 0 |
| PTN | ENSG0000 | protein_co | 0.500098 | 0 |
| TUBB6 | ENSG0000 | protein_co | 0.500405 | 0 |
| MICU3 | ENSG0000 | protein_co | 0.50055 | 0 |
| P2RX7 | ENSG0000 | protein_co | 0.500608 | 0 |
| ITGB8 | ENSG0000 | protein_co | 0.500634 | 0 |
| CTSK | ENSG0000 | protein_co | 0.500682 | 0 |
| PDGFD | ENSG0000 | protein_co | 0.500745 | 0 |
| SORBS2 | ENSG0000 | protein_co | 0.50099 | 0 |
| GNA14 | ENSG0000 | protein_co | 0.50108 | 0 |
| GLIS3 | ENSG0000 | protein_co | 0.50125 | 0 |
| NELL2 | ENSG0000 | protein_co | 0.501536 | 0 |
| LPA | ENSG0000 | protein_co | 0.501872 | 3.41E-33 |
| MAGI2 | ENSG0000 | protein_co | 0.501941 | 0 |
| DOK4 | ENSG0000 | protein_co | 0.502086 | 0 |
| CD99L2 | ENSG0000 | protein_co | 0.502496 | 0 |
| PPM1L | ENSG0000 | protein_co | 0.502555 | 0 |
| FOXJ2 | ENSG0000 | protein_co | 0.503187 | 0 |
| FBLN2 | ENSG0000 | protein_co | 0.503325 | 0 |
| LACC1 | ENSG0000 | protein_co | 0.503502 | 0 |
| CC2D2A | ENSG0000 | protein_co | 0.503512 | 0 |
| ENTPD1 | ENSG0000 | protein_co | 0.503611 | 0 |
| INKA2 | ENSG0000 | protein_co | 0.503634 | 0 |
| SNX7 | ENSG0000 | protein_co | 0.503638 | 0 |
| RAP1A | ENSG0000 | protein_co | 0.503734 | 0 |
| GLRB | ENSG0000 | protein_co | 0.503794 | 0 |
| CSPG4 | ENSG0000 | protein_co | 0.5038 | 0 |
| MLC1 | ENSG0000 | protein_co | 0.503988 | 0 |

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|----------|----------|------------|----------|----------|
| COL5A1 | ENSG0000 | protein_co | 0.504017 | 0 |
| ARSI | ENSG0000 | protein_co | 0.504428 | 0 |
| UNC5B | ENSG0000 | protein_co | 0.504596 | 0 |
| SULF1 | ENSG0000 | protein_co | 0.504854 | 0 |
| FAM153A | ENSG0000 | protein_co | 0.50504 | 0 |
| FBXL7 | ENSG0000 | protein_co | 0.505058 | 0 |
| MYOZ2 | ENSG0000 | protein_co | 0.505072 | 1.16E-33 |
| ZNF454 | ENSG0000 | protein_co | 0.505161 | 0 |
| SEMA3C | ENSG0000 | protein_co | 0.505372 | 0 |
| UNC5C | ENSG0000 | protein_co | 0.505403 | 0 |
| ELF1 | ENSG0000 | protein_co | 0.505494 | 0 |
| COLGALT2 | ENSG0000 | protein_co | 0.505526 | 0 |
| WDR1 | ENSG0000 | protein_co | 0.505683 | 0 |
| WIF1 | ENSG0000 | protein_co | 0.505701 | 9.37E-34 |
| LCP2 | ENSG0000 | protein_co | 0.505789 | 0 |
| DCC | ENSG0000 | protein_co | 0.50579 | 9.09E-34 |
| KLHL4 | ENSG0000 | protein_co | 0.505886 | 8.8E-34 |
| SGTB | ENSG0000 | protein_co | 0.506239 | 0 |
| GLIPR1 | ENSG0000 | protein_co | 0.506276 | 0 |
| PCDHGB7 | ENSG0000 | protein_co | 0.506661 | 0 |
| NFE2L2 | ENSG0000 | protein_co | 0.506727 | 0 |
| PARD6G | ENSG0000 | protein_co | 0.507241 | 0 |
| GYPC | ENSG0000 | protein_co | 0.507444 | 0 |
| AJUBA | ENSG0000 | protein_co | 0.507477 | 0 |
| CALHM2 | ENSG0000 | protein_co | 0.507582 | 0 |
| IDS | ENSG0000 | protein_co | 0.507664 | 0 |
| FAM83B | ENSG0000 | protein_co | 0.507695 | 4.75E-34 |
| FAM153B | ENSG0000 | protein_co | 0.507828 | 0 |
| NTN1 | ENSG0000 | protein_co | 0.507832 | 0 |
| TENT5B | ENSG0000 | protein_co | 0.507844 | 0 |
| GSTM4 | ENSG0000 | protein_co | 0.508166 | 0 |
| THSD7B | ENSG0000 | protein_co | 0.508178 | 4.02E-34 |
| ERAP1 | ENSG0000 | protein_co | 0.508183 | 0 |
| QKI | ENSG0000 | protein_co | 0.508333 | 0 |
| COL4A3 | ENSG0000 | protein_co | 0.508591 | 0 |
| COL16A1 | ENSG0000 | protein_co | 0.508633 | 0 |
| BMP5 | ENSG0000 | protein_co | 0.508838 | 3.21E-34 |
| SLFN11 | ENSG0000 | protein_co | 0.508867 | 0 |
| CEND1 | ENSG0000 | protein_co | 0.509027 | 0 |
| SLC27A6 | ENSG0000 | protein_co | 0.509176 | 2.86E-34 |
| HLA-DOA | ENSG0000 | protein_co | 0.509263 | 0 |
| ARHGEF9 | ENSG0000 | protein_co | 0.509325 | 0 |
| COL6A2 | ENSG0000 | protein_co | 0.509827 | 0 |
| CREBRF | ENSG0000 | protein_co | 0.510331 | 0 |
| MIXL1 | ENSG0000 | protein_co | 0.510365 | 1.9E-34 |
| CYYR1 | ENSG0000 | protein_co | 0.510431 | 0 |
| GALNT9 | ENSG0000 | protein_co | 0.510493 | 1.82E-34 |
| AHR | ENSG0000 | protein_co | 0.510513 | 0 |
| RAB37 | ENSG0000 | protein_co | 0.510621 | 0 |
| CCSER2 | ENSG0000 | protein_co | 0.510989 | 0 |
| FRMPD4 | ENSG0000 | protein_co | 0.511265 | 1.39E-34 |
| NFIA | ENSG0000 | protein_co | 0.511267 | 0 |
| NXPH3 | ENSG0000 | protein_co | 0.511618 | 0 |
| SULT1C4 | ENSG0000 | protein_co | 0.512062 | 0 |
| LPCAT2 | ENSG0000 | protein_co | 0.512284 | 0 |
| GDF7 | ENSG0000 | protein_co | 0.512614 | 0 |
| RASA3 | ENSG0000 | protein_co | 0.51268 | 0 |
| ARHGAP31 | ENSG0000 | protein_co | 0.512746 | 0 |

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|----------|----------|------------|----------|----------|
| NEK7 | ENSG0000 | protein_co | 0.513202 | 0 |
| PLS3 | ENSG0000 | protein_co | 0.51323 | 0 |
| TAGAP | ENSG0000 | protein_co | 0.513301 | 0 |
| HTR7 | ENSG0000 | protein_co | 0.51333 | 6.79E-35 |
| HMG20A | ENSG0000 | protein_co | 0.513383 | 0 |
| FRMD3 | ENSG0000 | protein_co | 0.513394 | 0 |
| LPIN1 | ENSG0000 | protein_co | 0.513715 | 0 |
| IGFBP5 | ENSG0000 | protein_co | 0.513715 | 0 |
| FGL2 | ENSG0000 | protein_co | 0.51391 | 0 |
| KIAA1210 | ENSG0000 | protein_co | 0.513912 | 0 |
| CD40 | ENSG0000 | protein_co | 0.513915 | 0 |
| CD200 | ENSG0000 | protein_co | 0.514004 | 0 |
| PLCD4 | ENSG0000 | protein_co | 0.514012 | 0 |
| PID1 | ENSG0000 | protein_co | 0.514137 | 0 |
| RFTN2 | ENSG0000 | protein_co | 0.51427 | 0 |
| MAP7D3 | ENSG0000 | protein_co | 0.514861 | 0 |
| NACC2 | ENSG0000 | protein_co | 0.514933 | 0 |
| TGFB3 | ENSG0000 | protein_co | 0.514962 | 0 |
| ZMAT3 | ENSG0000 | protein_co | 0.514998 | 0 |
| RGS18 | ENSG0000 | protein_co | 0.51507 | 3.7E-35 |
| STK26 | ENSG0000 | protein_co | 0.51544 | 0 |
| TAF3 | ENSG0000 | protein_co | 0.515452 | 0 |
| TMEM108 | ENSG0000 | protein_co | 0.51588 | 0 |
| SLC2A9 | ENSG0000 | protein_co | 0.515905 | 0 |
| ANTXR2 | ENSG0000 | protein_co | 0.515918 | 0 |
| ERVFRD-1 | ENSG0000 | protein_co | 0.516356 | 2.35E-35 |
| KLHL30 | ENSG0000 | protein_co | 0.516472 | 0 |
| MPDZ | ENSG0000 | protein_co | 0.516535 | 0 |
| RNASEL | ENSG0000 | protein_co | 0.516594 | 0 |
| CMTM5 | ENSG0000 | protein_co | 0.516736 | 2.06E-35 |
| TMIE | ENSG0000 | protein_co | 0.516766 | 2.04E-35 |
| SPOP | ENSG0000 | protein_co | 0.516775 | 0 |
| MAOB | ENSG0000 | protein_co | 0.517263 | 0 |
| GATA5 | ENSG0000 | protein_co | 0.517288 | 1.7E-35 |
| ROBO2 | ENSG0000 | protein_co | 0.517404 | 0 |
| RGS4 | ENSG0000 | protein_co | 0.517457 | 0 |
| TNXB | ENSG0000 | protein_co | 0.51755 | 0 |
| ARHGAP24 | ENSG0000 | protein_co | 0.517596 | 0 |
| RUNDC3B | ENSG0000 | protein_co | 0.51772 | 0 |
| SMTN | ENSG0000 | protein_co | 0.518126 | 0 |
| ACTC1 | ENSG0000 | protein_co | 0.51836 | 0 |
| SEMA3D | ENSG0000 | protein_co | 0.518437 | 0 |
| PPP3CB | ENSG0000 | protein_co | 0.518561 | 0 |
| CCN4 | ENSG0000 | protein_co | 0.518634 | 0 |
| TMEM71 | ENSG0000 | protein_co | 0.51869 | 0 |
| ITGB1 | ENSG0000 | protein_co | 0.518693 | 0 |
| TFPI | ENSG0000 | protein_co | 0.51881 | 0 |
| FGFR2 | ENSG0000 | protein_co | 0.519106 | 0 |
| CAMK1D | ENSG0000 | protein_co | 0.519163 | 0 |
| PHYHIP | ENSG0000 | protein_co | 0.519379 | 0 |
| NLRP1 | ENSG0000 | protein_co | 0.519433 | 0 |
| GBP6 | ENSG0000 | protein_co | 0.519696 | 7.23E-36 |
| ZBTB38 | ENSG0000 | protein_co | 0.519752 | 0 |
| SLC46A3 | ENSG0000 | protein_co | 0.519798 | 0 |
| TTYH2 | ENSG0000 | protein_co | 0.51983 | 0 |
| MPO | ENSG0000 | protein_co | 0.519848 | 6.84E-36 |
| COL17A1 | ENSG0000 | protein_co | 0.519873 | 0 |
| PTGER3 | ENSG0000 | protein_co | 0.5204 | 0 |

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|----------|----------|------------|----------|----------|
| ADD1 | ENSG0000 | protein_co | 0.520448 | 0 |
| IGF2 | ENSG0000 | protein_co | 0.520516 | 0 |
| COL4A2 | ENSG0000 | protein_co | 0.520849 | 0 |
| DOC2B | ENSG0000 | protein_co | 0.521176 | 0 |
| NLGN4Y | ENSG0000 | protein_co | 0.521259 | 0 |
| GCOM1 | ENSG0000 | protein_co | 0.521387 | 3.95E-36 |
| NCS1 | ENSG0000 | protein_co | 0.521402 | 0 |
| C21orf62 | ENSG0000 | protein_co | 0.521428 | 3.89E-36 |
| XPNPEP2 | ENSG0000 | protein_co | 0.521493 | 3.8E-36 |
| CEP112 | ENSG0000 | protein_co | 0.521755 | 0 |
| CCDC82 | ENSG0000 | protein_co | 0.521861 | 0 |
| FZD1 | ENSG0000 | protein_co | 0.521896 | 0 |
| AJAP1 | ENSG0000 | protein_co | 0.522078 | 0 |
| SFXN3 | ENSG0000 | protein_co | 0.522312 | 0 |
| FGD5 | ENSG0000 | protein_co | 0.522468 | 0 |
| EPB41L1 | ENSG0000 | protein_co | 0.52297 | 0 |
| SGCA | ENSG0000 | protein_co | 0.523123 | 0 |
| FCER1A | ENSG0000 | protein_co | 0.523375 | 0 |
| CLEC9A | ENSG0000 | protein_co | 0.523383 | 1.93E-36 |
| TLR1 | ENSG0000 | protein_co | 0.523476 | 0 |
| CDC42EP4 | ENSG0000 | protein_co | 0.523933 | 0 |
| HOXD11 | ENSG0000 | protein_co | 0.524061 | 1.51E-36 |
| PARM1 | ENSG0000 | protein_co | 0.524213 | 0 |
| SH3GLB1 | ENSG0000 | protein_co | 0.524223 | 0 |
| PRIMA1 | ENSG0000 | protein_co | 0.524348 | 0 |
| GPLD1 | ENSG0000 | protein_co | 0.52453 | 0 |
| HSPA4L | ENSG0000 | protein_co | 0.524721 | 0 |
| CCDC136 | ENSG0000 | protein_co | 0.524858 | 0 |
| SGCE | ENSG0000 | protein_co | 0.525261 | 0 |
| PPP1R3B | ENSG0000 | protein_co | 0.525263 | 0 |
| TRPS1 | ENSG0000 | protein_co | 0.525266 | 0 |
| PCDHB15 | ENSG0000 | protein_co | 0.525367 | 0 |
| PTH1R | ENSG0000 | protein_co | 0.525395 | 0 |
| TEX26 | ENSG0000 | protein_co | 0.525399 | 9.32E-37 |
| FYCO1 | ENSG0000 | protein_co | 0.525448 | 0 |
| EFNB1 | ENSG0000 | protein_co | 0.525605 | 0 |
| GCK | ENSG0000 | protein_co | 0.525672 | 0 |
| SIGLEC6 | ENSG0000 | protein_co | 0.525673 | 8.44E-37 |
| GDF10 | ENSG0000 | protein_co | 0.525685 | 8.4E-37 |
| IQCA1 | ENSG0000 | protein_co | 0.525702 | 0 |
| GAB2 | ENSG0000 | protein_co | 0.525941 | 0 |
| GLCE | ENSG0000 | protein_co | 0.526645 | 0 |
| ZNF385D | ENSG0000 | protein_co | 0.526841 | 0 |
| NR3C2 | ENSG0000 | protein_co | 0.527129 | 0 |
| C1R | ENSG0000 | protein_co | 0.527372 | 0 |
| SSC5D | ENSG0000 | protein_co | 0.52741 | 0 |
| GEM | ENSG0000 | protein_co | 0.527539 | 0 |
| TRIM22 | ENSG0000 | protein_co | 0.527549 | 0 |
| CA14 | ENSG0000 | protein_co | 0.527847 | 0 |
| RBMS2 | ENSG0000 | protein_co | 0.527915 | 0 |
| CYP27A1 | ENSG0000 | protein_co | 0.528095 | 0 |
| CHST6 | ENSG0000 | protein_co | 0.528104 | 0 |
| FER | ENSG0000 | protein_co | 0.528265 | 0 |
| MED21 | ENSG0000 | protein_co | 0.528571 | 0 |
| PRDM8 | ENSG0000 | protein_co | 0.529053 | 0 |
| LIMS2 | ENSG0000 | protein_co | 0.529341 | 0 |
| PAQR8 | ENSG0000 | protein_co | 0.529349 | 0 |
| KANK4 | ENSG0000 | protein_co | 0.529421 | 0 |

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|----------|----------|------------|----------|----------|
| ARMC4 | ENSG0000 | protein_co | 0.529421 | 0 |
| FAM13B | ENSG0000 | protein_co | 0.529508 | 0 |
| APOBEC3C | ENSG0000 | protein_co | 0.529605 | 0 |
| OPN1SW | ENSG0000 | protein_co | 0.529606 | 0 |
| NR3C1 | ENSG0000 | protein_co | 0.529679 | 0 |
| MCAM | ENSG0000 | protein_co | 0.529721 | 0 |
| DTNA | ENSG0000 | protein_co | 0.529907 | 0 |
| AVPR1A | ENSG0000 | protein_co | 0.529925 | 0 |
| CHODL | ENSG0000 | protein_co | 0.530102 | 0 |
| SOX15 | ENSG0000 | protein_co | 0.530199 | 0 |
| SOSTDC1 | ENSG0000 | protein_co | 0.530285 | 1.56E-37 |
| CYGB | ENSG0000 | protein_co | 0.530318 | 0 |
| RSU1 | ENSG0000 | protein_co | 0.53039 | 0 |
| TRABD2B | ENSG0000 | protein_co | 0.530496 | 0 |
| PDGFRB | ENSG0000 | protein_co | 0.530606 | 0 |
| WNT2B | ENSG0000 | protein_co | 0.530624 | 0 |
| ERC1 | ENSG0000 | protein_co | 0.530666 | 0 |
| F8 | ENSG0000 | protein_co | 0.530856 | 0 |
| ANTXR1 | ENSG0000 | protein_co | 0.530867 | 0 |
| DSCAML1 | ENSG0000 | protein_co | 0.531079 | 1.17E-37 |
| GNB5 | ENSG0000 | protein_co | 0.531108 | 0 |
| DPY19L1 | ENSG0000 | protein_co | 0.531276 | 0 |
| MYORG | ENSG0000 | protein_co | 0.531306 | 0 |
| TSHZ2 | ENSG0000 | protein_co | 0.531404 | 0 |
| GSDME | ENSG0000 | protein_co | 0.531633 | 0 |
| FBXL22 | ENSG0000 | protein_co | 0.531798 | 0 |
| FEZ2 | ENSG0000 | protein_co | 0.531807 | 0 |
| MYL9 | ENSG0000 | protein_co | 0.531909 | 0 |
| STK33 | ENSG0000 | protein_co | 0.532265 | 0 |
| PTPN14 | ENSG0000 | protein_co | 0.532728 | 0 |
| ANKRD45 | ENSG0000 | protein_co | 0.532818 | 6.12E-38 |
| CASQ1 | ENSG0000 | protein_co | 0.533127 | 0 |
| ENPP6 | ENSG0000 | protein_co | 0.533435 | 0 |
| HOXA7 | ENSG0000 | protein_co | 0.533558 | 4.64E-38 |
| PHACTR2 | ENSG0000 | protein_co | 0.533799 | 0 |
| EBF1 | ENSG0000 | protein_co | 0.533971 | 0 |
| ATP10D | ENSG0000 | protein_co | 0.53415 | 0 |
| ANP32E | ENSG0000 | protein_co | 0.53421 | 0 |
| CXCL12 | ENSG0000 | protein_co | 0.534279 | 0 |
| FHL2 | ENSG0000 | protein_co | 0.534295 | 0 |
| CCDC27 | ENSG0000 | protein_co | 0.53435 | 3.46E-38 |
| TMEM169 | ENSG0000 | protein_co | 0.534362 | 3.44E-38 |
| CKMT2 | ENSG0000 | protein_co | 0.534581 | 0 |
| PLCG2 | ENSG0000 | protein_co | 0.534738 | 0 |
| RAB7B | ENSG0000 | protein_co | 0.535246 | 0 |
| GBP1 | ENSG0000 | protein_co | 0.535263 | 0 |
| ZNF25 | ENSG0000 | protein_co | 0.535379 | 0 |
| SDC3 | ENSG0000 | protein_co | 0.535608 | 0 |
| ASAP1 | ENSG0000 | protein_co | 0.535685 | 0 |
| SSX2IP | ENSG0000 | protein_co | 0.535922 | 0 |
| ZNF469 | ENSG0000 | protein_co | 0.535973 | 0 |
| DSTN | ENSG0000 | protein_co | 0.536109 | 0 |
| SSBP2 | ENSG0000 | protein_co | 0.536211 | 0 |
| SPRY1 | ENSG0000 | protein_co | 0.536531 | 0 |
| PGRMC1 | ENSG0000 | protein_co | 0.536992 | 0 |
| DES | ENSG0000 | protein_co | 0.537429 | 0 |
| ITGA2 | ENSG0000 | protein_co | 0.537566 | 0 |
| VSIR | ENSG0000 | protein_co | 0.537674 | 0 |

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|----------|----------|------------|----------|----------|
| COL8A2 | ENSG0000 | protein_co | 0.537682 | 0 |
| NPTN | ENSG0000 | protein_co | 0.538144 | 0 |
| ROCK2 | ENSG0000 | protein_co | 0.538921 | 0 |
| FRMD7 | ENSG0000 | protein_co | 0.539015 | 5.97E-39 |
| MYADM | ENSG0000 | protein_co | 0.539087 | 0 |
| MOXD1 | ENSG0000 | protein_co | 0.539104 | 0 |
| CPVL | ENSG0000 | protein_co | 0.539338 | 0 |
| GFOD1 | ENSG0000 | protein_co | 0.539347 | 0 |
| CORIN | ENSG0000 | protein_co | 0.539521 | 0 |
| LGI3 | ENSG0000 | protein_co | 0.539653 | 4.68E-39 |
| ZCCHC12 | ENSG0000 | protein_co | 0.539929 | 4.22E-39 |
| EPS8 | ENSG0000 | protein_co | 0.54003 | 0 |
| CFAP221 | ENSG0000 | protein_co | 0.540033 | 4.05E-39 |
| MET | ENSG0000 | protein_co | 0.540302 | 0 |
| ARHGEF17 | ENSG0000 | protein_co | 0.54034 | 0 |
| WNT2 | ENSG0000 | protein_co | 0.54044 | 0 |
| CMYA5 | ENSG0000 | protein_co | 0.540533 | 0 |
| SSTR2 | ENSG0000 | protein_co | 0.540593 | 0 |
| NREP | ENSG0000 | protein_co | 0.540879 | 0 |
| PIPOX | ENSG0000 | protein_co | 0.540889 | 0 |
| BEST1 | ENSG0000 | protein_co | 0.540937 | 0 |
| SLC40A1 | ENSG0000 | protein_co | 0.541044 | 0 |
| PAK5 | ENSG0000 | protein_co | 0.541102 | 2.7E-39 |
| PEG3 | ENSG0000 | protein_co | 0.541138 | 0 |
| ZFP92 | ENSG0000 | protein_co | 0.541172 | 0 |
| GBP2 | ENSG0000 | protein_co | 0.541417 | 0 |
| CPA3 | ENSG0000 | protein_co | 0.541785 | 0 |
| CHST11 | ENSG0000 | protein_co | 0.541917 | 0 |
| MRAP2 | ENSG0000 | protein_co | 0.542251 | 0 |
| VAMP3 | ENSG0000 | protein_co | 0.542289 | 0 |
| ZNF365 | ENSG0000 | protein_co | 0.542526 | 0 |
| ZBTB4 | ENSG0000 | protein_co | 0.542726 | 0 |
| ADA2 | ENSG0000 | protein_co | 0.542995 | 0 |
| VIT | ENSG0000 | protein_co | 0.5432 | 0 |
| CAMK2A | ENSG0000 | protein_co | 0.543331 | 1.15E-39 |
| RPE65 | ENSG0000 | protein_co | 0.543349 | 1.14E-39 |
| PCSK7 | ENSG0000 | protein_co | 0.543352 | 0 |
| SULF2 | ENSG0000 | protein_co | 0.543473 | 0 |
| ITGB1BP2 | ENSG0000 | protein_co | 0.543893 | 0 |
| GAS1 | ENSG0000 | protein_co | 0.544152 | 0 |
| KLF12 | ENSG0000 | protein_co | 0.544611 | 0 |
| MYZAP | ENSG0000 | protein_co | 0.544736 | 0 |
| NACAD | ENSG0000 | protein_co | 0.544774 | 0 |
| TMEM43 | ENSG0000 | protein_co | 0.545013 | 0 |
| ELANE | ENSG0000 | protein_co | 0.545052 | 5.9E-40 |
| DRD5 | ENSG0000 | protein_co | 0.545055 | 5.9E-40 |
| OGFRL1 | ENSG0000 | protein_co | 0.545088 | 0 |
| PIK3C2G | ENSG0000 | protein_co | 0.545261 | 5.44E-40 |
| ZNF208 | ENSG0000 | protein_co | 0.545296 | 5.37E-40 |
| SLC14A1 | ENSG0000 | protein_co | 0.545372 | 0 |
| PCDHGC3 | ENSG0000 | protein_co | 0.545458 | 0 |
| ANKRD53 | ENSG0000 | protein_co | 0.546063 | 0 |
| CRYAB | ENSG0000 | protein_co | 0.546986 | 0 |
| ROBO1 | ENSG0000 | protein_co | 0.546989 | 0 |
| FOXP2 | ENSG0000 | protein_co | 0.547722 | 0 |
| P2RY12 | ENSG0000 | protein_co | 0.547803 | 2.02E-40 |
| NTRK1 | ENSG0000 | protein_co | 0.547865 | 0 |
| B4GALT6 | ENSG0000 | protein_co | 0.548029 | 0 |

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|----------|----------|------------|----------|----------|
| JAM3 | ENSG0000 | protein_co | 0.548411 | 0 |
| KCNIP3 | ENSG0000 | protein_co | 0.548578 | 0 |
| ARSJ | ENSG0000 | protein_co | 0.548607 | 0 |
| GRIA3 | ENSG0000 | protein_co | 0.548666 | 1.44E-40 |
| PRDM11 | ENSG0000 | protein_co | 0.549061 | 0 |
| BPI | ENSG0000 | protein_co | 0.549082 | 1.23E-40 |
| PHF19 | ENSG0000 | protein_co | 0.549264 | 0 |
| PENK | ENSG0000 | protein_co | 0.549293 | 1.13E-40 |
| FOXN3 | ENSG0000 | protein_co | 0.549426 | 0 |
| TAGLN | ENSG0000 | protein_co | 0.549489 | 0 |
| SPART | ENSG0000 | protein_co | 0.549527 | 0 |
| LIX1L | ENSG0000 | protein_co | 0.549689 | 0 |
| KLHL42 | ENSG0000 | protein_co | 0.549701 | 0 |
| PAM | ENSG0000 | protein_co | 0.549902 | 0 |
| KCNN3 | ENSG0000 | protein_co | 0.549951 | 0 |
| CNTFR | ENSG0000 | protein_co | 0.55049 | 0 |
| ADAMTSL2 | ENSG0000 | protein_co | 0.550627 | 0 |
| TLR3 | ENSG0000 | protein_co | 0.550697 | 0 |
| REERG | ENSG0000 | protein_co | 0.550721 | 0 |
| GLI1 | ENSG0000 | protein_co | 0.550751 | 0 |
| NRG1 | ENSG0000 | protein_co | 0.550949 | 0 |
| SORCS1 | ENSG0000 | protein_co | 0.551093 | 0 |
| EDA2R | ENSG0000 | protein_co | 0.551095 | 0 |
| MMP14 | ENSG0000 | protein_co | 0.551231 | 0 |
| JAKMIP2 | ENSG0000 | protein_co | 0.551429 | 0 |
| GPX8 | ENSG0000 | protein_co | 0.551574 | 0 |
| CX3CL1 | ENSG0000 | protein_co | 0.551584 | 0 |
| IFI16 | ENSG0000 | protein_co | 0.551635 | 0 |
| ECM1 | ENSG0000 | protein_co | 0.551696 | 0 |
| CD248 | ENSG0000 | protein_co | 0.551907 | 0 |
| KCNIP1 | ENSG0000 | protein_co | 0.552001 | 0 |
| ILDR2 | ENSG0000 | protein_co | 0.552106 | 0 |
| PCOLCE2 | ENSG0000 | protein_co | 0.552455 | 0 |
| CKM | ENSG0000 | protein_co | 0.552593 | 3.07E-41 |
| MYOM1 | ENSG0000 | protein_co | 0.552756 | 0 |
| RASD2 | ENSG0000 | protein_co | 0.553098 | 0 |
| HR | ENSG0000 | protein_co | 0.553248 | 0 |
| LEPROT | ENSG0000 | protein_co | 0.553345 | 0 |
| NAALADL1 | ENSG0000 | protein_co | 0.553352 | 0 |
| BNIP2 | ENSG0000 | protein_co | 0.553586 | 0 |
| RGMA | ENSG0000 | protein_co | 0.553739 | 0 |
| INPP5D | ENSG0000 | protein_co | 0.553867 | 0 |
| B3GNT9 | ENSG0000 | protein_co | 0.554006 | 0 |
| COL21A1 | ENSG0000 | protein_co | 0.554076 | 0 |
| MGARP | ENSG0000 | protein_co | 0.554472 | 0 |
| DNM3 | ENSG0000 | protein_co | 0.554529 | 0 |
| A2M | ENSG0000 | protein_co | 0.554558 | 0 |
| ADGRL2 | ENSG0000 | protein_co | 0.555147 | 0 |
| RGS13 | ENSG0000 | protein_co | 0.555247 | 1.06E-41 |
| OMD | ENSG0000 | protein_co | 0.555327 | 0 |
| PRELID2 | ENSG0000 | protein_co | 0.555359 | 0 |
| BACH2 | ENSG0000 | protein_co | 0.555361 | 0 |
| MARVELD1 | ENSG0000 | protein_co | 0.555376 | 0 |
| EDNRB | ENSG0000 | protein_co | 0.555648 | 0 |
| SHE | ENSG0000 | protein_co | 0.555988 | 0 |
| CYP11A1 | ENSG0000 | protein_co | 0.556041 | 7.74E-42 |
| RAB38 | ENSG0000 | protein_co | 0.55614 | 0 |
| SYT10 | ENSG0000 | protein_co | 0.556321 | 6.91E-42 |

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|-----------|----------|------------|----------|----------|
| KITLG | ENSG0000 | protein_co | 0.55641 | 0 |
| TNC | ENSG0000 | protein_co | 0.55707 | 0 |
| ITGA7 | ENSG0000 | protein_co | 0.557541 | 0 |
| SLIT2 | ENSG0000 | protein_co | 0.557837 | 0 |
| PHLDB1 | ENSG0000 | protein_co | 0.557855 | 0 |
| UBE2QL1 | ENSG0000 | protein_co | 0.557928 | 0 |
| EFEMP2 | ENSG0000 | protein_co | 0.558069 | 0 |
| LINGO2 | ENSG0000 | protein_co | 0.558211 | 3.22E-42 |
| ABCB1 | ENSG0000 | protein_co | 0.558264 | 0 |
| JCAD | ENSG0000 | protein_co | 0.558273 | 0 |
| SEPTIN10 | ENSG0000 | protein_co | 0.558547 | 0 |
| COL6A1 | ENSG0000 | protein_co | 0.558716 | 0 |
| MRAS | ENSG0000 | protein_co | 0.558743 | 0 |
| FAM124A | ENSG0000 | protein_co | 0.558881 | 0 |
| SH3BGRL | ENSG0000 | protein_co | 0.559083 | 0 |
| PTGDS | ENSG0000 | protein_co | 0.559515 | 0 |
| TINAGL1 | ENSG0000 | protein_co | 0.559529 | 0 |
| LRP4 | ENSG0000 | protein_co | 0.560068 | 0 |
| ANO1 | ENSG0000 | protein_co | 0.560076 | 0 |
| F7 | ENSG0000 | protein_co | 0.560112 | 1.49E-42 |
| GLIS2 | ENSG0000 | protein_co | 0.560405 | 0 |
| NELL1 | ENSG0000 | protein_co | 0.560468 | 1.29E-42 |
| DNAJC18 | ENSG0000 | protein_co | 0.56068 | 0 |
| ARHGEF25 | ENSG0000 | protein_co | 0.561097 | 0 |
| INSYN2A | ENSG0000 | protein_co | 0.561128 | 9.84E-43 |
| MTMR11 | ENSG0000 | protein_co | 0.561325 | 0 |
| ROR2 | ENSG0000 | protein_co | 0.561383 | 0 |
| MAT2B | ENSG0000 | protein_co | 0.561582 | 0 |
| AKAP6 | ENSG0000 | protein_co | 0.562007 | 0 |
| INSYN2B | ENSG0000 | protein_co | 0.56206 | 6.72E-43 |
| CCDC158 | ENSG0000 | protein_co | 0.562192 | 6.37E-43 |
| DACT3 | ENSG0000 | protein_co | 0.56229 | 0 |
| PDE4D | ENSG0000 | protein_co | 0.562337 | 0 |
| TLR4 | ENSG0000 | protein_co | 0.562567 | 0 |
| LINC00672 | ENSG0000 | protein_co | 0.562685 | 0 |
| CNN1 | ENSG0000 | protein_co | 0.562938 | 0 |
| ADAMTS8 | ENSG0000 | protein_co | 0.563009 | 0 |
| SLC18A2 | ENSG0000 | protein_co | 0.563042 | 4.49E-43 |
| SLC2A4 | ENSG0000 | protein_co | 0.563192 | 0 |
| ADAM33 | ENSG0000 | protein_co | 0.563265 | 0 |
| ZNF711 | ENSG0000 | protein_co | 0.563278 | 0 |
| SLFN12 | ENSG0000 | protein_co | 0.563345 | 0 |
| SLCO3A1 | ENSG0000 | protein_co | 0.563359 | 0 |
| POPDC2 | ENSG0000 | protein_co | 0.563779 | 0 |
| SNAI2 | ENSG0000 | protein_co | 0.563848 | 0 |
| ECRG4 | ENSG0000 | protein_co | 0.563852 | 0 |
| INPP5F | ENSG0000 | protein_co | 0.563979 | 0 |
| MTMR8 | ENSG0000 | protein_co | 0.564121 | 2.88E-43 |
| AMOTL2 | ENSG0000 | protein_co | 0.564826 | 0 |
| MYH6 | ENSG0000 | protein_co | 0.564889 | 2.09E-43 |
| PGAP1 | ENSG0000 | protein_co | 0.564961 | 0 |
| FRRS1L | ENSG0000 | protein_co | 0.565017 | 0 |
| CNTNAP1 | ENSG0000 | protein_co | 0.565077 | 0 |
| CD300LG | ENSG0000 | protein_co | 0.565217 | 1.83E-43 |
| RBMS1 | ENSG0000 | protein_co | 0.565264 | 0 |
| SERPINB9 | ENSG0000 | protein_co | 0.565624 | 0 |
| SAMD4A | ENSG0000 | protein_co | 0.565907 | 0 |
| SERPINA5 | ENSG0000 | protein_co | 0.565997 | 0 |

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|----------|----------|------------|----------|----------|
| GSN | ENSG0000 | protein_co | 0.566125 | 0 |
| PDCD1LG2 | ENSG0000 | protein_co | 0.566131 | 0 |
| FAM9B | ENSG0000 | protein_co | 0.566263 | 1.18E-43 |
| RCBTB2 | ENSG0000 | protein_co | 0.566395 | 0 |
| UST | ENSG0000 | protein_co | 0.566512 | 0 |
| EPB41L3 | ENSG0000 | protein_co | 0.567063 | 0 |
| STK32B | ENSG0000 | protein_co | 0.567178 | 0 |
| SEC14L6 | ENSG0000 | protein_co | 0.567327 | 7.6E-44 |
| RAB31 | ENSG0000 | protein_co | 0.567447 | 0 |
| FOXC1 | ENSG0000 | protein_co | 0.567955 | 0 |
| CLU | ENSG0000 | protein_co | 0.568691 | 0 |
| ZNF660 | ENSG0000 | protein_co | 0.56927 | 0 |
| KCNH2 | ENSG0000 | protein_co | 0.569567 | 0 |
| ZNF483 | ENSG0000 | protein_co | 0.569668 | 0 |
| SLC38A5 | ENSG0000 | protein_co | 0.569973 | 0 |
| STX7 | ENSG0000 | protein_co | 0.570311 | 0 |
| NHSL2 | ENSG0000 | protein_co | 0.571478 | 0 |
| FILIP1 | ENSG0000 | protein_co | 0.571711 | 0 |
| CEP120 | ENSG0000 | protein_co | 0.571715 | 0 |
| KCNE5 | ENSG0000 | protein_co | 0.571783 | 1.17E-44 |
| PNMA1 | ENSG0000 | protein_co | 0.571799 | 0 |
| ROR1 | ENSG0000 | protein_co | 0.572044 | 0 |
| PPP1R3C | ENSG0000 | protein_co | 0.572174 | 0 |
| SH3PXD2A | ENSG0000 | protein_co | 0.572285 | 0 |
| HAAO | ENSG0000 | protein_co | 0.572579 | 0 |
| CAPN6 | ENSG0000 | protein_co | 0.572783 | 7.62E-45 |
| CACNA1C | ENSG0000 | protein_co | 0.573022 | 0 |
| STARD9 | ENSG0000 | protein_co | 0.573192 | 0 |
| PAPLN | ENSG0000 | protein_co | 0.573361 | 0 |
| ACTG2 | ENSG0000 | protein_co | 0.573584 | 0 |
| MAPRE2 | ENSG0000 | protein_co | 0.573619 | 0 |
| TRIM6 | ENSG0000 | protein_co | 0.573849 | 0 |
| PLEKHH2 | ENSG0000 | protein_co | 0.574015 | 0 |
| SPEG | ENSG0000 | protein_co | 0.574244 | 0 |
| TOR1AIP1 | ENSG0000 | protein_co | 0.574316 | 0 |
| ABI3BP | ENSG0000 | protein_co | 0.574641 | 0 |
| FAM184A | ENSG0000 | protein_co | 0.574716 | 0 |
| ACP7 | ENSG0000 | protein_co | 0.574786 | 3.24E-45 |
| JAK1 | ENSG0000 | protein_co | 0.575036 | 0 |
| C12orf75 | ENSG0000 | protein_co | 0.575392 | 0 |
| TMOD1 | ENSG0000 | protein_co | 0.575637 | 0 |
| TRPM3 | ENSG0000 | protein_co | 0.57587 | 2.04E-45 |
| NKD1 | ENSG0000 | protein_co | 0.575923 | 0 |
| KIAA1755 | ENSG0000 | protein_co | 0.575945 | 0 |
| STUM | ENSG0000 | protein_co | 0.576872 | 0 |
| PTCHD1 | ENSG0000 | protein_co | 0.577302 | 1.1E-45 |
| PLAG1 | ENSG0000 | protein_co | 0.577342 | 0 |
| PDE2A | ENSG0000 | protein_co | 0.577494 | 0 |
| DBNDD2 | ENSG0000 | protein_co | 0.577854 | 0 |
| PCDHGA9 | ENSG0000 | protein_co | 0.57807 | 7.88E-46 |
| PCARE | ENSG0000 | protein_co | 0.578138 | 7.65E-46 |
| GAS7 | ENSG0000 | protein_co | 0.579196 | 0 |
| LURAP1 | ENSG0000 | protein_co | 0.579239 | 0 |
| PROK1 | ENSG0000 | protein_co | 0.579289 | 4.64E-46 |
| ARL10 | ENSG0000 | protein_co | 0.57944 | 0 |
| HMCN1 | ENSG0000 | protein_co | 0.579459 | 0 |
| EFNA5 | ENSG0000 | protein_co | 0.579535 | 0 |
| PABPC4L | ENSG0000 | protein_co | 0.579586 | 0 |

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|-----------|----------|------------|----------|----------|
| RAB11FIP2 | ENSG0000 | protein_co | 0.580063 | 0 |
| RTL5 | ENSG0000 | protein_co | 0.580251 | 0 |
| MAP1B | ENSG0000 | protein_co | 0.58059 | 0 |
| PLA2G4A | ENSG0000 | protein_co | 0.581156 | 0 |
| NRP2 | ENSG0000 | protein_co | 0.581294 | 0 |
| SEMA6D | ENSG0000 | protein_co | 0.581846 | 0 |
| PURG | ENSG0000 | protein_co | 0.581961 | 1.44E-46 |
| PIK3R1 | ENSG0000 | protein_co | 0.582081 | 0 |
| MS4A2 | ENSG0000 | protein_co | 0.582347 | 0 |
| DPT | ENSG0000 | protein_co | 0.582355 | 0 |
| FBLN5 | ENSG0000 | protein_co | 0.582464 | 0 |
| GNG12 | ENSG0000 | protein_co | 0.582473 | 0 |
| LDB2 | ENSG0000 | protein_co | 0.582483 | 0 |
| ST8SIA1 | ENSG0000 | protein_co | 0.583142 | 0 |
| KANK1 | ENSG0000 | protein_co | 0.583154 | 0 |
| TRIM61 | ENSG0000 | protein_co | 0.58338 | 7.73E-47 |
| MFAP4 | ENSG0000 | protein_co | 0.583968 | 0 |
| DST | ENSG0000 | protein_co | 0.584039 | 0 |
| HVCN1 | ENSG0000 | protein_co | 0.584043 | 0 |
| OLFML3 | ENSG0000 | protein_co | 0.584123 | 0 |
| HECW1 | ENSG0000 | protein_co | 0.584201 | 0 |
| TNFAIP8L3 | ENSG0000 | protein_co | 0.584248 | 0 |
| XKR5 | ENSG0000 | protein_co | 0.584389 | 4.95E-47 |
| ABCA6 | ENSG0000 | protein_co | 0.584693 | 0 |
| ARHGEF40 | ENSG0000 | protein_co | 0.584802 | 0 |
| ARHGEF6 | ENSG0000 | protein_co | 0.584964 | 0 |
| MDFIC | ENSG0000 | protein_co | 0.585152 | 0 |
| TRO | ENSG0000 | protein_co | 0.585158 | 0 |
| CDK15 | ENSG0000 | protein_co | 0.58526 | 0 |
| TBX4 | ENSG0000 | protein_co | 0.586066 | 2.35E-47 |
| NTRK2 | ENSG0000 | protein_co | 0.586822 | 0 |
| EID3 | ENSG0000 | protein_co | 0.587032 | 0 |
| FBXO30 | ENSG0000 | protein_co | 0.587251 | 0 |
| FNBP1 | ENSG0000 | protein_co | 0.587332 | 0 |
| EPHB1 | ENSG0000 | protein_co | 0.587454 | 0 |
| SEMA5A | ENSG0000 | protein_co | 0.587889 | 0 |
| TCEAL5 | ENSG0000 | protein_co | 0.588074 | 9.58E-48 |
| LUM | ENSG0000 | protein_co | 0.588421 | 0 |
| TGFB111 | ENSG0000 | protein_co | 0.588468 | 0 |
| CEP68 | ENSG0000 | protein_co | 0.588646 | 0 |
| KCNA2 | ENSG0000 | protein_co | 0.588801 | 6.91E-48 |
| PAGE4 | ENSG0000 | protein_co | 0.588844 | 6.78E-48 |
| CRIM1 | ENSG0000 | protein_co | 0.588913 | 0 |
| TENM2 | ENSG0000 | protein_co | 0.589276 | 0 |
| RGS9 | ENSG0000 | protein_co | 0.589654 | 0 |
| NEURL1B | ENSG0000 | protein_co | 0.589867 | 0 |
| HGF | ENSG0000 | protein_co | 0.589925 | 0 |
| KCTD9 | ENSG0000 | protein_co | 0.589971 | 0 |
| FOXF2 | ENSG0000 | protein_co | 0.590547 | 0 |
| ZBTB47 | ENSG0000 | protein_co | 0.590594 | 0 |
| NMUR1 | ENSG0000 | protein_co | 0.590712 | 0 |
| RPRM | ENSG0000 | protein_co | 0.590747 | 0 |
| GPM6A | ENSG0000 | protein_co | 0.590877 | 0 |
| AFAP1L2 | ENSG0000 | protein_co | 0.590891 | 0 |
| ANKRD35 | ENSG0000 | protein_co | 0.590985 | 0 |
| NES | ENSG0000 | protein_co | 0.591056 | 0 |
| RSPO2 | ENSG0000 | protein_co | 0.591307 | 0 |
| SYNDIG1 | ENSG0000 | protein_co | 0.591318 | 0 |

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|----------|----------|------------|----------|----------|
| WSCD2 | ENSG0000 | protein_co | 0.591408 | 0 |
| GRIK5 | ENSG0000 | protein_co | 0.59165 | 0 |
| DRP2 | ENSG0000 | protein_co | 0.591987 | 0 |
| ADCY3 | ENSG0000 | protein_co | 0.59243 | 0 |
| PREX2 | ENSG0000 | protein_co | 0.592459 | 0 |
| YAP1 | ENSG0000 | protein_co | 0.592536 | 0 |
| MEF2A | ENSG0000 | protein_co | 0.592843 | 0 |
| MYL3 | ENSG0000 | protein_co | 0.592936 | 1.06E-48 |
| AMPH | ENSG0000 | protein_co | 0.59316 | 0 |
| TCEAL2 | ENSG0000 | protein_co | 0.593161 | 9.59E-49 |
| CTF1 | ENSG0000 | protein_co | 0.593194 | 0 |
| LAYN | ENSG0000 | protein_co | 0.593229 | 0 |
| FST | ENSG0000 | protein_co | 0.593245 | 0 |
| CERK | ENSG0000 | protein_co | 0.593379 | 0 |
| SPRED1 | ENSG0000 | protein_co | 0.593541 | 0 |
| CSRP1 | ENSG0000 | protein_co | 0.59371 | 0 |
| ADGRB3 | ENSG0000 | protein_co | 0.593944 | 6.7E-49 |
| MYOF | ENSG0000 | protein_co | 0.593976 | 0 |
| CEP126 | ENSG0000 | protein_co | 0.594029 | 0 |
| RMDN2 | ENSG0000 | protein_co | 0.594163 | 0 |
| AGPAT4 | ENSG0000 | protein_co | 0.59417 | 0 |
| C1QTNF1 | ENSG0000 | protein_co | 0.5943 | 0 |
| RNF180 | ENSG0000 | protein_co | 0.594353 | 0 |
| KCNJ3 | ENSG0000 | protein_co | 0.594363 | 0 |
| NAALAD2 | ENSG0000 | protein_co | 0.594515 | 0 |
| SERPING1 | ENSG0000 | protein_co | 0.594615 | 0 |
| KRT222 | ENSG0000 | protein_co | 0.594662 | 4.83E-49 |
| ATCAY | ENSG0000 | protein_co | 0.594692 | 0 |
| HFE | ENSG0000 | protein_co | 0.594738 | 0 |
| MBNL1 | ENSG0000 | protein_co | 0.594967 | 0 |
| DGKG | ENSG0000 | protein_co | 0.595206 | 0 |
| PNMA8B | ENSG0000 | protein_co | 0.595305 | 0 |
| KSR1 | ENSG0000 | protein_co | 0.595514 | 0 |
| APOB | ENSG0000 | protein_co | 0.595851 | 2.79E-49 |
| MEF2C | ENSG0000 | protein_co | 0.596014 | 0 |
| INMT | ENSG0000 | protein_co | 0.596272 | 0 |
| LAMA4 | ENSG0000 | protein_co | 0.596287 | 0 |
| RECK | ENSG0000 | protein_co | 0.596791 | 0 |
| SCHIP1 | ENSG0000 | protein_co | 0.596869 | 1.75E-49 |
| MSN | ENSG0000 | protein_co | 0.59691 | 0 |
| L3MBTL4 | ENSG0000 | protein_co | 0.596925 | 0 |
| TMEM200 | ENSG0000 | protein_co | 0.596992 | 1.65E-49 |
| HS3ST3B1 | ENSG0000 | protein_co | 0.597267 | 0 |
| NAP1L3 | ENSG0000 | protein_co | 0.597669 | 0 |
| MB21D2 | ENSG0000 | protein_co | 0.598135 | 0 |
| AFF2 | ENSG0000 | protein_co | 0.59825 | 9.2E-50 |
| WIPF3 | ENSG0000 | protein_co | 0.598361 | 0 |
| EDN3 | ENSG0000 | protein_co | 0.598377 | 8.67E-50 |
| LRRC34 | ENSG0000 | protein_co | 0.598519 | 0 |
| NAV2 | ENSG0000 | protein_co | 0.598653 | 0 |
| ID4 | ENSG0000 | protein_co | 0.598858 | 0 |
| RHBDL3 | ENSG0000 | protein_co | 0.599112 | 0 |
| SRL | ENSG0000 | protein_co | 0.599114 | 0 |
| WFDC1 | ENSG0000 | protein_co | 0.599625 | 0 |
| ACACB | ENSG0000 | protein_co | 0.599687 | 0 |
| JAM2 | ENSG0000 | protein_co | 0.599708 | 0 |
| MRC2 | ENSG0000 | protein_co | 0.599841 | 0 |
| SLC1A7 | ENSG0000 | protein_co | 0.59995 | 0 |

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|----------|----------|------------|----------|----------|
| HECTD2 | ENSG0000 | protein_co | 0.600007 | 0 |
| PLAAT5 | ENSG0000 | protein_co | 0.600648 | 3.01E-50 |
| CDKL1 | ENSG0000 | protein_co | 0.601206 | 0 |
| KIAA0408 | ENSG0000 | protein_co | 0.60157 | 1.95E-50 |
| ABCD2 | ENSG0000 | protein_co | 0.601644 | 1.88E-50 |
| DCBLD2 | ENSG0000 | protein_co | 0.601792 | 0 |
| ZNF185 | ENSG0000 | protein_co | 0.602351 | 0 |
| RUSC2 | ENSG0000 | protein_co | 0.602477 | 0 |
| POGLUT3 | ENSG0000 | protein_co | 0.602523 | 0 |
| RNF175 | ENSG0000 | protein_co | 0.602552 | 1.23E-50 |
| PDPN | ENSG0000 | protein_co | 0.602877 | 0 |
| PLBD1 | ENSG0000 | protein_co | 0.602904 | 0 |
| SMOC1 | ENSG0000 | protein_co | 0.603223 | 0 |
| C15orf41 | ENSG0000 | protein_co | 0.603846 | 0 |
| SETBP1 | ENSG0000 | protein_co | 0.603996 | 0 |
| PLXDC2 | ENSG0000 | protein_co | 0.604583 | 0 |
| NYAP1 | ENSG0000 | protein_co | 0.604663 | 0 |
| EPHA7 | ENSG0000 | protein_co | 0.604847 | 0 |
| SMAD3 | ENSG0000 | protein_co | 0.604937 | 0 |
| FAM162B | ENSG0000 | protein_co | 0.605015 | 0 |
| RHOJ | ENSG0000 | protein_co | 0.605031 | 0 |
| PCYT1B | ENSG0000 | protein_co | 0.605396 | 3.19E-51 |
| SLC12A4 | ENSG0000 | protein_co | 0.605798 | 0 |
| CRISPLD2 | ENSG0000 | protein_co | 0.606118 | 0 |
| LMO4 | ENSG0000 | protein_co | 0.606168 | 0 |
| CACNA2D | ENSG0000 | protein_co | 0.606638 | 0 |
| ADAM19 | ENSG0000 | protein_co | 0.606741 | 0 |
| TMEM106 | ENSG0000 | protein_co | 0.606756 | 0 |
| KATNAL1 | ENSG0000 | protein_co | 0.607163 | 0 |
| SLC35F4 | ENSG0000 | protein_co | 0.607179 | 1.36E-51 |
| ADAMTSL | ENSG0000 | protein_co | 0.607651 | 0 |
| CYTL1 | ENSG0000 | protein_co | 0.607705 | 0 |
| FEZ1 | ENSG0000 | protein_co | 0.607845 | 0 |
| ADRA1D | ENSG0000 | protein_co | 0.608158 | 8.49E-52 |
| PRPH2 | ENSG0000 | protein_co | 0.608506 | 0 |
| KLHL5 | ENSG0000 | protein_co | 0.608852 | 0 |
| QPRT | ENSG0000 | protein_co | 0.608937 | 0 |
| AL096711 | ENSG0000 | protein_co | 0.609609 | 4.21E-52 |
| NFASC | ENSG0000 | protein_co | 0.610324 | 0 |
| BDNF | ENSG0000 | protein_co | 0.610445 | 0 |
| PMP22 | ENSG0000 | protein_co | 0.610727 | 0 |
| TIMP3 | ENSG0000 | protein_co | 0.610791 | 2.38E-52 |
| CSMD3 | ENSG0000 | protein_co | 0.610809 | 2.36E-52 |
| F10 | ENSG0000 | protein_co | 0.610839 | 0 |
| PAMR1 | ENSG0000 | protein_co | 0.610948 | 0 |
| MRGPRE | ENSG0000 | protein_co | 0.611799 | 1.45E-52 |
| HSPB7 | ENSG0000 | protein_co | 0.612122 | 0 |
| PRDM5 | ENSG0000 | protein_co | 0.612154 | 0 |
| INMT-MIN | ENSG0000 | protein_co | 0.612234 | 1.18E-52 |
| NTRK3 | ENSG0000 | protein_co | 0.612619 | 0 |
| TMTC1 | ENSG0000 | protein_co | 0.612877 | 0 |
| DNAJB5 | ENSG0000 | protein_co | 0.613077 | 0 |
| TACC1 | ENSG0000 | protein_co | 0.613287 | 0 |
| SAMD14 | ENSG0000 | protein_co | 0.613559 | 0 |
| TSPAN11 | ENSG0000 | protein_co | 0.613718 | 0 |
| TCEAL7 | ENSG0000 | protein_co | 0.613783 | 0 |
| ACOX2 | ENSG0000 | protein_co | 0.614357 | 0 |
| FBN1 | ENSG0000 | protein_co | 0.614583 | 0 |

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|----------|----------|------------|----------|----------|
| DENND2A | ENSG0000 | protein_co | 0.615184 | 0 |
| DMC1 | ENSG0000 | protein_co | 0.615547 | 0 |
| LCA5 | ENSG0000 | protein_co | 0.615687 | 0 |
| PLPP7 | ENSG0000 | protein_co | 0.615703 | 0 |
| WNT16 | ENSG0000 | protein_co | 0.615819 | 2.02E-53 |
| CORO1C | ENSG0000 | protein_co | 0.615971 | 0 |
| TRIM9 | ENSG0000 | protein_co | 0.616936 | 1.16E-53 |
| NKAPL | ENSG0000 | protein_co | 0.616957 | 1.15E-53 |
| SNAP25 | ENSG0000 | protein_co | 0.617317 | 9.61E-54 |
| MRGPRF | ENSG0000 | protein_co | 0.617459 | 0 |
| FCHSD2 | ENSG0000 | protein_co | 0.618077 | 0 |
| MMP2 | ENSG0000 | protein_co | 0.618417 | 0 |
| IP6K3 | ENSG0000 | protein_co | 0.618464 | 5.43E-54 |
| WIPF1 | ENSG0000 | protein_co | 0.618557 | 0 |
| GXYLT2 | ENSG0000 | protein_co | 0.618605 | 0 |
| BEND6 | ENSG0000 | protein_co | 0.618685 | 0 |
| KCNS2 | ENSG0000 | protein_co | 0.618733 | 4.74E-54 |
| ETV5 | ENSG0000 | protein_co | 0.619185 | 0 |
| ELMOD1 | ENSG0000 | protein_co | 0.619524 | 3.19E-54 |
| MAML2 | ENSG0000 | protein_co | 0.6196 | 0 |
| CYS1 | ENSG0000 | protein_co | 0.619957 | 0 |
| GNAZ | ENSG0000 | protein_co | 0.620457 | 0 |
| JPH2 | ENSG0000 | protein_co | 0.620587 | 0 |
| SBSPON | ENSG0000 | protein_co | 0.62061 | 0 |
| P2RX2 | ENSG0000 | protein_co | 0.620619 | 0 |
| ARHGAP23 | ENSG0000 | protein_co | 0.620682 | 0 |
| STOM | ENSG0000 | protein_co | 0.620864 | 0 |
| MXRA5 | ENSG0000 | protein_co | 0.62113 | 0 |
| IL6ST | ENSG0000 | protein_co | 0.621366 | 0 |
| HSPB6 | ENSG0000 | protein_co | 0.621557 | 0 |
| PLEKHA2 | ENSG0000 | protein_co | 0.621753 | 0 |
| KCNB1 | ENSG0000 | protein_co | 0.621988 | 0 |
| NRG2 | ENSG0000 | protein_co | 0.6222 | 0 |
| PDE7B | ENSG0000 | protein_co | 0.622364 | 0 |
| APOBEC3C | ENSG0000 | protein_co | 0.622883 | 0 |
| MCC | ENSG0000 | protein_co | 0.622934 | 0 |
| PDE1C | ENSG0000 | protein_co | 0.623479 | 4.33E-55 |
| TGFB2 | ENSG0000 | protein_co | 0.623515 | 0 |
| DPYD | ENSG0000 | protein_co | 0.623516 | 0 |
| ARHGAP11 | ENSG0000 | protein_co | 0.623632 | 0 |
| ABCA8 | ENSG0000 | protein_co | 0.623842 | 0 |
| LRRC2 | ENSG0000 | protein_co | 0.623928 | 0 |
| DRD1 | ENSG0000 | protein_co | 0.624017 | 3.3E-55 |
| PYGM | ENSG0000 | protein_co | 0.624448 | 0 |
| CAVIN1 | ENSG0000 | protein_co | 0.624519 | 0 |
| ZNF154 | ENSG0000 | protein_co | 0.624729 | 0 |
| KCNQ5 | ENSG0000 | protein_co | 0.624881 | 0 |
| NR2F1 | ENSG0000 | protein_co | 0.626132 | 0 |
| CFH | ENSG0000 | protein_co | 0.626189 | 0 |
| SYNPO | ENSG0000 | protein_co | 0.626689 | 0 |
| SYNC | ENSG0000 | protein_co | 0.626945 | 0 |
| EMILIN1 | ENSG0000 | protein_co | 0.627073 | 0 |
| TCF7L1 | ENSG0000 | protein_co | 0.627251 | 0 |
| TMEM47 | ENSG0000 | protein_co | 0.627507 | 0 |
| RARB | ENSG0000 | protein_co | 0.627779 | 0 |
| STOX2 | ENSG0000 | protein_co | 0.628073 | 0 |
| RBFOX3 | ENSG0000 | protein_co | 0.628437 | 0 |
| PRICKLE1 | ENSG0000 | protein_co | 0.629072 | 0 |

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|-----------|----------|------------|----------|----------|
| TCF4 | ENSG0000 | protein_co | 0.629137 | 0 |
| NID2 | ENSG0000 | protein_co | 0.629204 | 0 |
| CRTAP | ENSG0000 | protein_co | 0.629338 | 0 |
| RBPM5 | ENSG0000 | protein_co | 0.629419 | 0 |
| SYDE1 | ENSG0000 | protein_co | 0.629442 | 0 |
| TBL1X | ENSG0000 | protein_co | 0.629538 | 0 |
| HOXD12 | ENSG0000 | protein_co | 0.629785 | 1.69E-56 |
| EVC2 | ENSG0000 | protein_co | 0.63028 | 0 |
| EMILIN3 | ENSG0000 | protein_co | 0.630415 | 0 |
| RSPO1 | ENSG0000 | protein_co | 0.630558 | 1.13E-56 |
| ITSN1 | ENSG0000 | protein_co | 0.630754 | 0 |
| ANK2 | ENSG0000 | protein_co | 0.63086 | 0 |
| CCBE1 | ENSG0000 | protein_co | 0.63134 | 0 |
| PBX1 | ENSG0000 | protein_co | 0.631533 | 0 |
| MOB3B | ENSG0000 | protein_co | 0.632018 | 0 |
| STAT5B | ENSG0000 | protein_co | 0.632069 | 0 |
| AXL | ENSG0000 | protein_co | 0.632343 | 0 |
| TVP23A | ENSG0000 | protein_co | 0.632399 | 0 |
| GRK5 | ENSG0000 | protein_co | 0.632773 | 0 |
| LAMA2 | ENSG0000 | protein_co | 0.632868 | 0 |
| CPEB1 | ENSG0000 | protein_co | 0.633431 | 0 |
| MAN1A1 | ENSG0000 | protein_co | 0.633616 | 0 |
| ADCYAP1F | ENSG0000 | protein_co | 0.634035 | 1.82E-57 |
| C20orf194 | ENSG0000 | protein_co | 0.634095 | 0 |
| GPRC5B | ENSG0000 | protein_co | 0.634131 | 0 |
| FOXO1 | ENSG0000 | protein_co | 0.634367 | 0 |
| ACTA2 | ENSG0000 | protein_co | 0.634582 | 0 |
| CBX7 | ENSG0000 | protein_co | 0.634762 | 0 |
| CCDC85A | ENSG0000 | protein_co | 0.634926 | 1.14E-57 |
| LHFPL2 | ENSG0000 | protein_co | 0.635016 | 0 |
| FAM107A | ENSG0000 | protein_co | 0.635414 | 0 |
| NYNRIN | ENSG0000 | protein_co | 0.636031 | 0 |
| EPB41L2 | ENSG0000 | protein_co | 0.636043 | 0 |
| WWTR1 | ENSG0000 | protein_co | 0.636509 | 0 |
| SYNE1 | ENSG0000 | protein_co | 0.636662 | 0 |
| PRKCA | ENSG0000 | protein_co | 0.636858 | 0 |
| DMD | ENSG0000 | protein_co | 0.636909 | 0 |
| GLI3 | ENSG0000 | protein_co | 0.637051 | 0 |
| KLF8 | ENSG0000 | protein_co | 0.637205 | 0 |
| ITGA8 | ENSG0000 | protein_co | 0.637246 | 0 |
| ILK | ENSG0000 | protein_co | 0.637568 | 0 |
| PLCL2 | ENSG0000 | protein_co | 0.637635 | 0 |
| SOX5 | ENSG0000 | protein_co | 0.637828 | 0 |
| ABCG2 | ENSG0000 | protein_co | 0.638374 | 0 |
| ANXA6 | ENSG0000 | protein_co | 0.63845 | 0 |
| SCN5A | ENSG0000 | protein_co | 0.639285 | 0 |
| BMERB1 | ENSG0000 | protein_co | 0.639818 | 0 |
| DUSP19 | ENSG0000 | protein_co | 0.639911 | 0 |
| GJC1 | ENSG0000 | protein_co | 0.640045 | 0 |
| DPYSL2 | ENSG0000 | protein_co | 0.6405 | 0 |
| FILIP1L | ENSG0000 | protein_co | 0.6405 | 0 |
| ALDH1A2 | ENSG0000 | protein_co | 0.640576 | 0 |
| MR1 | ENSG0000 | protein_co | 0.640719 | 0 |
| PPARGC1A | ENSG0000 | protein_co | 0.640736 | 0 |
| RND2 | ENSG0000 | protein_co | 0.641047 | 0 |
| LONRF3 | ENSG0000 | protein_co | 0.641235 | 0 |
| PRELP | ENSG0000 | protein_co | 0.641423 | 0 |
| TEAD1 | ENSG0000 | protein_co | 0.641764 | 0 |

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|---------|----------|------------|----------|----------|
| ZNF728 | ENSG0000 | protein_co | 0.642138 | 2.36E-59 |
| DCHS2 | ENSG0000 | protein_co | 0.642255 | 2.21E-59 |
| LARGE1 | ENSG0000 | protein_co | 0.642325 | 0 |
| FBXO17 | ENSG0000 | protein_co | 0.642343 | 0 |
| C1S | ENSG0000 | protein_co | 0.642958 | 0 |
| HIF3A | ENSG0000 | protein_co | 0.642976 | 0 |
| TWIST2 | ENSG0000 | protein_co | 0.643027 | 0 |
| DACT1 | ENSG0000 | protein_co | 0.643072 | 0 |
| EHD2 | ENSG0000 | protein_co | 0.643185 | 0 |
| IGSF1 | ENSG0000 | protein_co | 0.643733 | 9.86E-60 |
| LSM11 | ENSG0000 | protein_co | 0.643897 | 0 |
| SLC16A7 | ENSG0000 | protein_co | 0.644047 | 0 |
| GFPT2 | ENSG0000 | protein_co | 0.64407 | 0 |
| PAPPA | ENSG0000 | protein_co | 0.644491 | 0 |
| CCDC80 | ENSG0000 | protein_co | 0.64472 | 0 |
| ATP1B2 | ENSG0000 | protein_co | 0.644919 | 0 |
| DENND2B | ENSG0000 | protein_co | 0.645951 | 0 |
| RCAN2 | ENSG0000 | protein_co | 0.646315 | 0 |
| NID1 | ENSG0000 | protein_co | 0.647036 | 0 |
| SGCG | ENSG0000 | protein_co | 0.647213 | 1.45E-60 |
| SHISAL1 | ENSG0000 | protein_co | 0.647246 | 0 |
| CCDC69 | ENSG0000 | protein_co | 0.647417 | 0 |
| SYNM | ENSG0000 | protein_co | 0.647652 | 0 |
| RND3 | ENSG0000 | protein_co | 0.64777 | 0 |
| LGR6 | ENSG0000 | protein_co | 0.648254 | 0 |
| KIT | ENSG0000 | protein_co | 0.648276 | 0 |
| GJA1 | ENSG0000 | protein_co | 0.64829 | 0 |
| LPP | ENSG0000 | protein_co | 0.648351 | 0 |
| ECM2 | ENSG0000 | protein_co | 0.648642 | 0 |
| LTBP1 | ENSG0000 | protein_co | 0.648746 | 0 |
| LPAR1 | ENSG0000 | protein_co | 0.648767 | 0 |
| SRPX | ENSG0000 | protein_co | 0.648845 | 0 |
| DYNC111 | ENSG0000 | protein_co | 0.649656 | 0 |
| TPM1 | ENSG0000 | protein_co | 0.649958 | 0 |
| RUNX1T1 | ENSG0000 | protein_co | 0.650289 | 0 |
| TLN1 | ENSG0000 | protein_co | 0.650685 | 0 |
| DCHS1 | ENSG0000 | protein_co | 0.6514 | 0 |
| CSRNP3 | ENSG0000 | protein_co | 0.651567 | 0 |
| GLIS1 | ENSG0000 | protein_co | 0.651656 | 1.2E-61 |
| RBFOX2 | ENSG0000 | protein_co | 0.652152 | 0 |
| MBNL2 | ENSG0000 | protein_co | 0.652673 | 0 |
| FHOD3 | ENSG0000 | protein_co | 0.652745 | 0 |
| SFRP1 | ENSG0000 | protein_co | 0.652827 | 0 |
| CCDC88A | ENSG0000 | protein_co | 0.652859 | 0 |
| GATM | ENSG0000 | protein_co | 0.652915 | 0 |
| KCNT2 | ENSG0000 | protein_co | 0.653266 | 4.84E-62 |
| ZNF516 | ENSG0000 | protein_co | 0.65383 | 0 |
| ITGB3 | ENSG0000 | protein_co | 0.654114 | 0 |
| ACTN1 | ENSG0000 | protein_co | 0.654127 | 0 |
| CELF2 | ENSG0000 | protein_co | 0.654199 | 0 |
| MMP16 | ENSG0000 | protein_co | 0.654249 | 0 |
| LRRN3 | ENSG0000 | protein_co | 0.654724 | 2.11E-62 |
| CAVIN2 | ENSG0000 | protein_co | 0.654797 | 0 |
| EPM2A | ENSG0000 | protein_co | 0.65503 | 0 |
| PLN | ENSG0000 | protein_co | 0.655092 | 0 |
| TGFBR2 | ENSG0000 | protein_co | 0.655307 | 0 |
| GNAL | ENSG0000 | protein_co | 0.655607 | 0 |
| BMPER | ENSG0000 | protein_co | 0.655888 | 0 |

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|----------|----------|------------|----------|----------|
| PSIP1 | ENSG0000 | protein_co | 0.657093 | 0 |
| BMP4 | ENSG0000 | protein_co | 0.657343 | 0 |
| SCUBE3 | ENSG0000 | protein_co | 0.657562 | 0 |
| PLCL1 | ENSG0000 | protein_co | 0.657631 | 0 |
| IQSEC3 | ENSG0000 | protein_co | 0.657719 | 0 |
| RIMS3 | ENSG0000 | protein_co | 0.658135 | 0 |
| ZEB1 | ENSG0000 | protein_co | 0.658467 | 0 |
| EGFLAM | ENSG0000 | protein_co | 0.658599 | 0 |
| LEPR | ENSG0000 | protein_co | 0.658807 | 0 |
| HSD11B1 | ENSG0000 | protein_co | 0.658833 | 0 |
| KLHL13 | ENSG0000 | protein_co | 0.659302 | 0 |
| PCDH7 | ENSG0000 | protein_co | 0.66016 | 0 |
| ASB2 | ENSG0000 | protein_co | 0.660863 | 0 |
| JPH4 | ENSG0000 | protein_co | 0.662114 | 0 |
| ISL1 | ENSG0000 | protein_co | 0.662588 | 0 |
| AHNAK2 | ENSG0000 | protein_co | 0.662641 | 0 |
| KIRREL1 | ENSG0000 | protein_co | 0.662788 | 0 |
| EDIL3 | ENSG0000 | protein_co | 0.664247 | 0 |
| NPR2 | ENSG0000 | protein_co | 0.664271 | 0 |
| COL6A3 | ENSG0000 | protein_co | 0.664474 | 0 |
| MYOZ3 | ENSG0000 | protein_co | 0.664559 | 0 |
| CNRIP1 | ENSG0000 | protein_co | 0.665375 | 0 |
| CALD1 | ENSG0000 | protein_co | 0.665915 | 0 |
| COL4A4 | ENSG0000 | protein_co | 0.666089 | 0 |
| KLHL33 | ENSG0000 | protein_co | 0.666464 | 2.22E-65 |
| TSPAN2 | ENSG0000 | protein_co | 0.666662 | 0 |
| TTC28 | ENSG0000 | protein_co | 0.666719 | 0 |
| TSHZ3 | ENSG0000 | protein_co | 0.666864 | 0 |
| PPP1R12A | ENSG0000 | protein_co | 0.66715 | 0 |
| SERPINF1 | ENSG0000 | protein_co | 0.667199 | 0 |
| FKBP7 | ENSG0000 | protein_co | 0.668003 | 0 |
| CCND2 | ENSG0000 | protein_co | 0.668041 | 0 |
| RBFOX1 | ENSG0000 | protein_co | 0.66839 | 6.99E-66 |
| GLT8D2 | ENSG0000 | protein_co | 0.668627 | 0 |
| GNG2 | ENSG0000 | protein_co | 0.670178 | 0 |
| TRPC6 | ENSG0000 | protein_co | 0.670282 | 0 |
| RGS7BP | ENSG0000 | protein_co | 0.671199 | 0 |
| PODN | ENSG0000 | protein_co | 0.671391 | 0 |
| RGN | ENSG0000 | protein_co | 0.672028 | 0 |
| CCDC8 | ENSG0000 | protein_co | 0.672327 | 0 |
| MAP1A | ENSG0000 | protein_co | 0.672369 | 0 |
| CAND2 | ENSG0000 | protein_co | 0.673124 | 0 |
| NCAM1 | ENSG0000 | protein_co | 0.673293 | 0 |
| FAIM2 | ENSG0000 | protein_co | 0.673832 | 0 |
| CORO2B | ENSG0000 | protein_co | 0.674215 | 0 |
| CES1 | ENSG0000 | protein_co | 0.674232 | 0 |
| CLIC4 | ENSG0000 | protein_co | 0.674647 | 0 |
| NDP | ENSG0000 | protein_co | 0.675441 | 0 |
| PRRX1 | ENSG0000 | protein_co | 0.675546 | 0 |
| SPRY2 | ENSG0000 | protein_co | 0.676443 | 0 |
| CAMK4 | ENSG0000 | protein_co | 0.676606 | 0 |
| FMN2 | ENSG0000 | protein_co | 0.677284 | 3.01E-68 |
| MXRA7 | ENSG0000 | protein_co | 0.677335 | 0 |
| STARD8 | ENSG0000 | protein_co | 0.677685 | 0 |
| SGCB | ENSG0000 | protein_co | 0.677908 | 0 |
| CLDN11 | ENSG0000 | protein_co | 0.678119 | 0 |
| PIEZO2 | ENSG0000 | protein_co | 0.678382 | 0 |
| ZNF536 | ENSG0000 | protein_co | 0.678456 | 1.45E-68 |

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|----------|----------|------------|----------|----------|
| SLITRK6 | ENSG0000 | protein_co | 0.678594 | 0 |
| PDZRN4 | ENSG0000 | protein_co | 0.678679 | 0 |
| DCN | ENSG0000 | protein_co | 0.678857 | 0 |
| ARMH4 | ENSG0000 | protein_co | 0.679036 | 0 |
| DIXDC1 | ENSG0000 | protein_co | 0.679201 | 0 |
| NHS | ENSG0000 | protein_co | 0.679338 | 0 |
| CAMK2G | ENSG0000 | protein_co | 0.679475 | 0 |
| KCNMB1 | ENSG0000 | protein_co | 0.679559 | 0 |
| MCF2 | ENSG0000 | protein_co | 0.679774 | 6.32E-69 |
| HHIP | ENSG0000 | protein_co | 0.680128 | 0 |
| DZIP1 | ENSG0000 | protein_co | 0.680406 | 0 |
| SV2A | ENSG0000 | protein_co | 0.680517 | 0 |
| COL14A1 | ENSG0000 | protein_co | 0.681174 | 0 |
| HSPB8 | ENSG0000 | protein_co | 0.681935 | 0 |
| CAP2 | ENSG0000 | protein_co | 0.682021 | 0 |
| LTBP4 | ENSG0000 | protein_co | 0.682214 | 0 |
| PRDM6 | ENSG0000 | protein_co | 0.682216 | 0 |
| PEAK1 | ENSG0000 | protein_co | 0.68229 | 0 |
| ADGRD1 | ENSG0000 | protein_co | 0.68242 | 0 |
| DNAJB4 | ENSG0000 | protein_co | 0.68314 | 0 |
| SCN4B | ENSG0000 | protein_co | 0.683434 | 0 |
| PLSCR4 | ENSG0000 | protein_co | 0.683621 | 0 |
| CHST3 | ENSG0000 | protein_co | 0.684082 | 0 |
| PLPP3 | ENSG0000 | protein_co | 0.684669 | 0 |
| RNF112 | ENSG0000 | protein_co | 0.684941 | 0 |
| BOC | ENSG0000 | protein_co | 0.685521 | 0 |
| PTGS1 | ENSG0000 | protein_co | 0.686386 | 0 |
| ACSL4 | ENSG0000 | protein_co | 0.686571 | 0 |
| LRCH2 | ENSG0000 | protein_co | 0.686595 | 0 |
| HOXD13 | ENSG0000 | protein_co | 0.687025 | 0 |
| CCDC89 | ENSG0000 | protein_co | 0.687549 | 0 |
| AOX1 | ENSG0000 | protein_co | 0.68796 | 0 |
| FHL1 | ENSG0000 | protein_co | 0.688005 | 0 |
| LMO3 | ENSG0000 | protein_co | 0.688706 | 0 |
| IRAK3 | ENSG0000 | protein_co | 0.688947 | 0 |
| RGL1 | ENSG0000 | protein_co | 0.688958 | 0 |
| WFIKKN2 | ENSG0000 | protein_co | 0.689291 | 1.41E-71 |
| C2orf88 | ENSG0000 | protein_co | 0.689424 | 0 |
| FBLN1 | ENSG0000 | protein_co | 0.689537 | 0 |
| SCARA3 | ENSG0000 | protein_co | 0.689579 | 0 |
| EYA1 | ENSG0000 | protein_co | 0.689964 | 0 |
| GPR161 | ENSG0000 | protein_co | 0.690816 | 0 |
| ANO4 | ENSG0000 | protein_co | 0.690819 | 0 |
| CLVS2 | ENSG0000 | protein_co | 0.691014 | 4.55E-72 |
| EOGT | ENSG0000 | protein_co | 0.691277 | 0 |
| GPM6B | ENSG0000 | protein_co | 0.691762 | 0 |
| PDGFRA | ENSG0000 | protein_co | 0.691858 | 0 |
| SLC47A1 | ENSG0000 | protein_co | 0.692218 | 0 |
| ZEB2 | ENSG0000 | protein_co | 0.69266 | 0 |
| CAMK1G | ENSG0000 | protein_co | 0.692695 | 0 |
| EFEMP1 | ENSG0000 | protein_co | 0.69272 | 0 |
| SH3PXD2B | ENSG0000 | protein_co | 0.69273 | 0 |
| TBX5 | ENSG0000 | protein_co | 0.69321 | 1.06E-72 |
| CAV2 | ENSG0000 | protein_co | 0.693362 | 0 |
| KCNJ8 | ENSG0000 | protein_co | 0.693844 | 0 |
| GIPC2 | ENSG0000 | protein_co | 0.694052 | 0 |
| CCDC181 | ENSG0000 | protein_co | 0.694945 | 0 |
| SMIM10 | ENSG0000 | protein_co | 0.695011 | 0 |

| | | | | |
|----------|----------|------------|----------|----------|
| SCN2B | ENSG0000 | protein_co | 0.695338 | 2.57E-73 |
| SLC16A2 | ENSG0000 | protein_co | 0.696077 | 0 |
| SLMAP | ENSG0000 | protein_co | 0.697163 | 0 |
| SEC23A | ENSG0000 | protein_co | 0.697394 | 0 |
| ALDH1L2 | ENSG0000 | protein_co | 0.697735 | 0 |
| COL13A1 | ENSG0000 | protein_co | 0.698411 | 0 |
| ADGRL3 | ENSG0000 | protein_co | 0.698883 | 0 |
| TIMP2 | ENSG0000 | protein_co | 0.700031 | 0 |
| PRKG1 | ENSG0000 | protein_co | 0.700638 | 0 |
| VWA5A | ENSG0000 | protein_co | 0.700743 | 0 |
| CAV1 | ENSG0000 | protein_co | 0.702083 | 0 |
| CTTNBP2 | ENSG0000 | protein_co | 0.702397 | 0 |
| DSE | ENSG0000 | protein_co | 0.702467 | 0 |
| RASL12 | ENSG0000 | protein_co | 0.702542 | 0 |
| C3orf70 | ENSG0000 | protein_co | 0.702732 | 0 |
| MAP3K20 | ENSG0000 | protein_co | 0.702968 | 0 |
| TRPC1 | ENSG0000 | protein_co | 0.703211 | 0 |
| KIAA1614 | ENSG0000 | protein_co | 0.703245 | 0 |
| LRRK2 | ENSG0000 | protein_co | 0.704321 | 0 |
| HRH2 | ENSG0000 | protein_co | 0.705458 | 2.51E-76 |
| FLNA | ENSG0000 | protein_co | 0.705524 | 0 |
| PAK3 | ENSG0000 | protein_co | 0.705652 | 0 |
| ATP1A2 | ENSG0000 | protein_co | 0.705898 | 0 |
| SYT11 | ENSG0000 | protein_co | 0.706073 | 0 |
| PARVA | ENSG0000 | protein_co | 0.706186 | 0 |
| TMEM132 | ENSG0000 | protein_co | 0.706993 | 8.55E-77 |
| MITF | ENSG0000 | protein_co | 0.707396 | 0 |
| ZCCHC24 | ENSG0000 | protein_co | 0.707505 | 0 |
| GSTM5 | ENSG0000 | protein_co | 0.707751 | 0 |
| FOXF1 | ENSG0000 | protein_co | 0.708388 | 0 |
| ITIH5 | ENSG0000 | protein_co | 0.708873 | 0 |
| SLC16A4 | ENSG0000 | protein_co | 0.709105 | 0 |
| ANGPTL1 | ENSG0000 | protein_co | 0.709564 | 0 |
| CCDC178 | ENSG0000 | protein_co | 0.710691 | 0 |
| FLNC | ENSG0000 | protein_co | 0.711064 | 0 |
| FXVD6 | ENSG0000 | protein_co | 0.711194 | 0 |
| KCNMA1 | ENSG0000 | protein_co | 0.711339 | 0 |
| MEIS2 | ENSG0000 | protein_co | 0.711719 | 0 |
| NECAB1 | ENSG0000 | protein_co | 0.712759 | 0 |
| ASXL3 | ENSG0000 | protein_co | 0.713208 | 0 |
| GNAO1 | ENSG0000 | protein_co | 0.713624 | 0 |
| CFL2 | ENSG0000 | protein_co | 0.713684 | 0 |
| KY | ENSG0000 | protein_co | 0.714097 | 5.33E-79 |
| TSPAN18 | ENSG0000 | protein_co | 0.7147 | 0 |
| SPARCL1 | ENSG0000 | protein_co | 0.715788 | 0 |
| MPP2 | ENSG0000 | protein_co | 0.715847 | 0 |
| ATP2B4 | ENSG0000 | protein_co | 0.71597 | 0 |
| GLI2 | ENSG0000 | protein_co | 0.716036 | 0 |
| COL4A6 | ENSG0000 | protein_co | 0.716065 | 0 |
| PPP1R12B | ENSG0000 | protein_co | 0.716233 | 0 |
| FGFR1 | ENSG0000 | protein_co | 0.7165 | 0 |
| SYNPO2 | ENSG0000 | protein_co | 0.716672 | 0 |
| FREM2 | ENSG0000 | protein_co | 0.716758 | 7.65E-80 |
| DKK3 | ENSG0000 | protein_co | 0.71722 | 0 |
| EVS2 | ENSG0000 | protein_co | 0.717769 | 3.64E-80 |
| NT5E | ENSG0000 | protein_co | 0.718367 | 0 |
| SVIL | ENSG0000 | protein_co | 0.718482 | 0 |
| ANKRD33E | ENSG0000 | protein_co | 0.718734 | 0 |

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|----------|----------|------------|----------|----------|
| ABCC9 | ENSG0000 | protein_co | 0.719766 | 0 |
| TMLHE | ENSG0000 | protein_co | 0.72056 | 0 |
| MEIS1 | ENSG0000 | protein_co | 0.720697 | 0 |
| LMOD1 | ENSG0000 | protein_co | 0.720954 | 0 |
| KLHL14 | ENSG0000 | protein_co | 0.720955 | 0 |
| KCNAB1 | ENSG0000 | protein_co | 0.721516 | 0 |
| UBXN10 | ENSG0000 | protein_co | 0.722153 | 0 |
| C1QTNF7 | ENSG0000 | protein_co | 0.722927 | 0 |
| BNC2 | ENSG0000 | protein_co | 0.723192 | 0 |
| GCNT4 | ENSG0000 | protein_co | 0.723216 | 0 |
| SRD5A2 | ENSG0000 | protein_co | 0.723355 | 0 |
| LDB3 | ENSG0000 | protein_co | 0.726097 | 0 |
| SLC51B | ENSG0000 | protein_co | 0.726441 | 5.38E-83 |
| B3GALT2 | ENSG0000 | protein_co | 0.726737 | 0 |
| IL33 | ENSG0000 | protein_co | 0.726951 | 0 |
| ARHGAP20 | ENSG0000 | protein_co | 0.727131 | 0 |
| MYH11 | ENSG0000 | protein_co | 0.727349 | 0 |
| SEMA3A | ENSG0000 | protein_co | 0.727844 | 0 |
| PGM5 | ENSG0000 | protein_co | 0.728189 | 0 |
| HMGCLL1 | ENSG0000 | protein_co | 0.728253 | 1.34E-83 |
| RASGRF2 | ENSG0000 | protein_co | 0.728423 | 0 |
| ADAMTS5 | ENSG0000 | protein_co | 0.728972 | 0 |
| ITGA1 | ENSG0000 | protein_co | 0.72985 | 0 |
| DPYSL3 | ENSG0000 | protein_co | 0.730122 | 0 |
| CLIP3 | ENSG0000 | protein_co | 0.730807 | 0 |
| AOC3 | ENSG0000 | protein_co | 0.731161 | 0 |
| ITGA9 | ENSG0000 | protein_co | 0.731772 | 0 |
| TNS1 | ENSG0000 | protein_co | 0.731888 | 0 |
| GPRASP1 | ENSG0000 | protein_co | 0.73197 | 0 |
| HLF | ENSG0000 | protein_co | 0.732353 | 0 |
| RAB9B | ENSG0000 | protein_co | 0.733208 | 0 |
| ANO5 | ENSG0000 | protein_co | 0.733631 | 0 |
| C7 | ENSG0000 | protein_co | 0.734549 | 0 |
| PDE5A | ENSG0000 | protein_co | 0.735188 | 0 |
| ATRN1 | ENSG0000 | protein_co | 0.736011 | 0 |
| SORBS1 | ENSG0000 | protein_co | 0.73618 | 0 |
| EDNRA | ENSG0000 | protein_co | 0.737579 | 0 |
| MYOCD | ENSG0000 | protein_co | 0.738036 | 0 |
| CPED1 | ENSG0000 | protein_co | 0.738189 | 0 |
| NEGR1 | ENSG0000 | protein_co | 0.739077 | 0 |
| LRP1B | ENSG0000 | protein_co | 0.739199 | 2.31E-87 |
| PCDH9 | ENSG0000 | protein_co | 0.739471 | 0 |
| TENM3 | ENSG0000 | protein_co | 0.739615 | 0 |
| PRICKLE2 | ENSG0000 | protein_co | 0.739788 | 0 |
| ASPA | ENSG0000 | protein_co | 0.73983 | 0 |
| CLIC6 | ENSG0000 | protein_co | 0.739849 | 0 |
| HS3ST3A1 | ENSG0000 | protein_co | 0.740037 | 0 |
| BHMT2 | ENSG0000 | protein_co | 0.740218 | 0 |
| MASP1 | ENSG0000 | protein_co | 0.740806 | 0 |
| FGF7 | ENSG0000 | protein_co | 0.741122 | 0 |
| GFRA1 | ENSG0000 | protein_co | 0.741243 | 0 |
| CLIP4 | ENSG0000 | protein_co | 0.742296 | 0 |
| RGS22 | ENSG0000 | protein_co | 0.742708 | 0 |
| FLRT2 | ENSG0000 | protein_co | 0.742841 | 0 |
| SLC24A3 | ENSG0000 | protein_co | 0.743454 | 0 |
| ADGRA2 | ENSG0000 | protein_co | 0.743715 | 0 |
| HACD4 | ENSG0000 | protein_co | 0.744028 | 0 |
| KANK2 | ENSG0000 | protein_co | 0.744231 | 0 |

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|----------|----------|------------|----------|----------|
| PCDH10 | ENSG0000 | protein_co | 0.744577 | 0 |
| DAAM2 | ENSG0000 | protein_co | 0.745071 | 0 |
| FAT3 | ENSG0000 | protein_co | 0.74525 | 0 |
| PRTFDC1 | ENSG0000 | protein_co | 0.746065 | 0 |
| MATN2 | ENSG0000 | protein_co | 0.746146 | 0 |
| METTL24 | ENSG0000 | protein_co | 0.747247 | 2.98E-90 |
| MAMLD1 | ENSG0000 | protein_co | 0.747621 | 0 |
| FAXDC2 | ENSG0000 | protein_co | 0.7483 | 0 |
| ACSS3 | ENSG0000 | protein_co | 0.748464 | 0 |
| CACHD1 | ENSG0000 | protein_co | 0.748504 | 0 |
| ADAM22 | ENSG0000 | protein_co | 0.749746 | 0 |
| TMEM200f | ENSG0000 | protein_co | 0.750944 | 0 |
| TMEM252 | ENSG0000 | protein_co | 0.752319 | 3.95E-92 |
| NEXN | ENSG0000 | protein_co | 0.754871 | 0 |
| C8orf88 | ENSG0000 | protein_co | 0.755084 | 0 |
| ANO6 | ENSG0000 | protein_co | 0.755213 | 0 |
| TCF21 | ENSG0000 | protein_co | 0.756211 | 0 |
| PTGIS | ENSG0000 | protein_co | 0.756603 | 0 |
| NRK | ENSG0000 | protein_co | 0.75673 | 0 |
| VCL | ENSG0000 | protein_co | 0.756809 | 0 |
| PRKCB | ENSG0000 | protein_co | 0.757036 | 0 |
| SORCS2 | ENSG0000 | protein_co | 0.757704 | 0 |
| TMEM35A | ENSG0000 | protein_co | 0.75839 | 0 |
| PTGER2 | ENSG0000 | protein_co | 0.758524 | 0 |
| PALLD | ENSG0000 | protein_co | 0.759289 | 0 |
| IRAG1 | ENSG0000 | protein_co | 0.759859 | 0 |
| FZD7 | ENSG0000 | protein_co | 0.760065 | 0 |
| ZNF423 | ENSG0000 | protein_co | 0.760072 | 0 |
| HEPH | ENSG0000 | protein_co | 0.76019 | 0 |
| MSRB3 | ENSG0000 | protein_co | 0.760808 | 0 |
| PDGFC | ENSG0000 | protein_co | 0.761058 | 0 |
| FERMT2 | ENSG0000 | protein_co | 0.761556 | 0 |
| LRFN5 | ENSG0000 | protein_co | 0.762248 | 0 |
| MKX | ENSG0000 | protein_co | 0.762966 | 0 |
| RBMS3 | ENSG0000 | protein_co | 0.76333 | 0 |
| EYA4 | ENSG0000 | protein_co | 0.76348 | 0 |
| NLGN3 | ENSG0000 | protein_co | 0.764923 | 0 |
| STAC | ENSG0000 | protein_co | 0.76596 | 0 |
| FAT4 | ENSG0000 | protein_co | 0.768115 | 0 |
| NDNF | ENSG0000 | protein_co | 0.769095 | 0 |
| ADRA1A | ENSG0000 | protein_co | 0.770646 | 0 |
| FGF2 | ENSG0000 | protein_co | 0.771639 | 0 |
| MYLK | ENSG0000 | protein_co | 0.771831 | 0 |
| DDR2 | ENSG0000 | protein_co | 0.773884 | 0 |
| CHRD1 | ENSG0000 | protein_co | 0.774867 | 0 |
| CDC42EP3 | ENSG0000 | protein_co | 0.775236 | 0 |
| PRNP | ENSG0000 | protein_co | 0.775905 | 0 |
| TGFBR3 | ENSG0000 | protein_co | 0.776813 | 0 |
| TSLP | ENSG0000 | protein_co | 0.778278 | 0 |
| FGF10 | ENSG0000 | protein_co | 0.778696 | 1.1E-102 |
| SSPN | ENSG0000 | protein_co | 0.782621 | 0 |
| FRMD6 | ENSG0000 | protein_co | 0.783033 | 0 |
| ADCY5 | ENSG0000 | protein_co | 0.783275 | 0 |
| TRPC4 | ENSG0000 | protein_co | 0.783456 | 0 |
| VSTM4 | ENSG0000 | protein_co | 0.7837 | 0 |
| ZNF804A | ENSG0000 | protein_co | 0.783853 | 6.4E-105 |
| OLFML1 | ENSG0000 | protein_co | 0.784847 | 0 |
| SCN7A | ENSG0000 | protein_co | 0.788814 | 0 |

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|--------|----------|------------|----------|---|
| MAMDC2 | ENSG0000 | protein_co | 0.79024 | 0 |
| PCDH18 | ENSG0000 | protein_co | 0.792653 | 0 |
| EPHA3 | ENSG0000 | protein_co | 0.793872 | 0 |
| OGN | ENSG0000 | protein_co | 0.79422 | 0 |
| PGR | ENSG0000 | protein_co | 0.79618 | 0 |
| CLMP | ENSG0000 | protein_co | 0.797488 | 0 |
| CNTN1 | ENSG0000 | protein_co | 0.801029 | 0 |
| SLC8A1 | ENSG0000 | protein_co | 0.801823 | 0 |
| JAZF1 | ENSG0000 | protein_co | 0.811539 | 0 |
| ANGPT1 | ENSG0000 | protein_co | 0.816632 | 0 |
| SPON1 | ENSG0000 | protein_co | 0.817729 | 0 |
| TRHDE | ENSG0000 | protein_co | 0.823513 | 0 |

Supplementary Dataset File_1 : Correlation analysis revealed 1170 genes with $|R^2| > 0.5$ and $P < 0.0$

ted to SPOCK3 expression.

05 that were thought to be related to SPOCK3 expression.