|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Table S1 The genes co-expressed with ZC3H13 having an average Spearman’s correlation coefficient of 0.5 | | | | |
| Correlated Gene | Cytoband | Spearman's Correlation | p-Value | q-Value |
| FNDC3A | 13q14.2 | 0.758692729 | 2.26E-66 | 4.53E-62 |
| AKAP11 | 13q14.11 | 0.701788759 | 6.67E-53 | 6.69E-49 |
| VPS36 | 13q14.3 | 0.691218675 | 9.53E-51 | 6.38E-47 |
| VWA8 | 13q14.11 | 0.683057768 | 3.81E-49 | 1.91E-45 |
| UTP14C | 13q14.3 | 0.671306585 | 6.27E-47 | 2.52E-43 |
| COG3 | 13q14.13 | 0.66482934 | 9.46E-46 | 3.17E-42 |
| CHD9 | 16q12.2 | 0.652409875 | 1.43E-43 | 4.10E-40 |
| KBTBD7 | 13q14.11 | 0.652053097 | 1.64E-43 | 4.13E-40 |
| LRCH1 | 13q14.13-q14.2 | 0.65056505 | 2.95E-43 | 6.20E-40 |
| SUCLA2 | 13q14.2 | 0.650450016 | 3.09E-43 | 6.20E-40 |
| LATS2 | 13q12.11 | 0.638276565 | 3.26E-41 | 5.95E-38 |
| CARF | 2q33.2 | 0.637899286 | 3.76E-41 | 6.29E-38 |
| CREBRF | 5q35.1 | 0.628355686 | 1.25E-39 | 1.93E-36 |
| SPATA13 | 13q12.12 | 0.627452209 | 1.73E-39 | 2.48E-36 |
| KIAA1109 | 4q27 | 0.625867066 | 3.05E-39 | 4.09E-36 |
| ELF1 | 13q14.11 | 0.624049576 | 5.84E-39 | 7.16E-36 |
| COG6 | 13q14.11 | 0.623942515 | 6.06E-39 | 7.16E-36 |
| GPALPP1 | 13q14.12 | 0.623502023 | 7.09E-39 | 7.69E-36 |
| RCBTB1 | 13q14.2 | 0.623427751 | 7.28E-39 | 7.69E-36 |
| SAC3D1 | 11q13.1 | -0.623083741 | 8.22E-39 | 8.26E-36 |
| USP53 | 4q26 | 0.619865905 | 2.55E-38 | 2.44E-35 |
| ERN1 | 17q23.3 | 0.618004281 | 4.88E-38 | 4.46E-35 |
| ERCC6L2 | 9q22.32 | 0.615518508 | 1.15E-37 | 1.01E-34 |
| MYCBP2 | 13q22.3 | 0.613282452 | 2.49E-37 | 2.08E-34 |
| OTUD4 | 4q31.21 | 0.612575445 | 3.16E-37 | 2.54E-34 |
| RB1 | 13q14.2 | 0.605873299 | 3.02E-36 | 2.34E-33 |
| LBHD1 | 11q12.3 | -0.605306056 | 3.65E-36 | 2.72E-33 |
| STARD13 | 13q13.1-q13.2 | 0.605140338 | 3.86E-36 | 2.77E-33 |
| UFM1 | 13q13.3 | 0.604624675 | 4.58E-36 | 3.17E-33 |
| NUDT1 | 7p22.3 | -0.602011668 | 1.08E-35 | 7.26E-33 |
| CCDC167 | 6p21.2 | -0.601829392 | 1.15E-35 | 7.46E-33 |
| ROMO1 | 20q11.22 | -0.6012471 | 1.39E-35 | 8.74E-33 |
| SNRPC | 6p21.31 | -0.599872949 | 2.18E-35 | 1.33E-32 |
| PROX1 | 1q32.3 | 0.599132343 | 2.78E-35 | 1.64E-32 |
| ABHD18 | 4q28.2 | 0.597197256 | 5.20E-35 | 2.98E-32 |
| KAT6B | 10q22.2 | 0.596212344 | 7.14E-35 | 3.98E-32 |
| CCDC186 | 10q25.3 | 0.594989104 | 1.06E-34 | 5.74E-32 |
| MEA1 | 6p21.1 | -0.594754479 | 1.14E-34 | 6.02E-32 |
| HIPK3 | 11p13 | 0.593777824 | 1.56E-34 | 8.02E-32 |
| TTBK2 | 15q15.2 | 0.593616562 | 1.64E-34 | 8.23E-32 |
| MRPL14 | 6p21.1 | -0.592810566 | 2.12E-34 | 1.00E-31 |
| REV3L | 6q21 | 0.592777251 | 2.14E-34 | 1.00E-31 |
| MPHOSPH8 | 13q12.11 | 0.592777009 | 2.14E-34 | 1.00E-31 |
| BOD1L1 | 4p15.33 | 0.592098718 | 2.66E-34 | 1.21E-31 |
| RBM43 | 2q23.3 | 0.592032089 | 2.71E-34 | 1.21E-31 |
| FBXL3 | 13q22.3 | 0.589986523 | 5.18E-34 | 2.26E-31 |
| DRAP1 | 11q13.1 | -0.588346753 | 8.66E-34 | 3.70E-31 |
| KLHL28 | 14q21.2 | 0.58758902 | 1.10E-33 | 4.59E-31 |
| REST | 4q12 | 0.587346138 | 1.18E-33 | 4.85E-31 |
| CCNT2 | 2q21.3 | 0.58595718 | 1.82E-33 | 7.33E-31 |
| FOXO1 | 13q14.11 | 0.585473124 | 2.12E-33 | 8.35E-31 |
| HERC3 | 4q22.1 | 0.583927275 | 3.42E-33 | 1.32E-30 |
| PSMG3 | 7p22.3 | -0.581745604 | 6.68E-33 | 2.53E-30 |
| BAZ2B | 2q24.2 | 0.581369179 | 7.50E-33 | 2.79E-30 |
| GEMIN7 | 19q13.32 | -0.581021513 | 8.33E-33 | 3.04E-30 |
| USP12 | 13q12.13 | 0.580718165 | 9.14E-33 | 3.28E-30 |
| RBL2 | 16q12.2 | 0.580552731 | 9.62E-33 | 3.39E-30 |
| TRAPPC8 | 18q12.1 | 0.580476421 | 9.84E-33 | 3.41E-30 |
| DTYMK | 2q37.3 | -0.579670141 | 1.26E-32 | 4.28E-30 |
| MTMR6 | 13q12.13 | 0.577125143 | 2.72E-32 | 9.09E-30 |
| MYO9A | 15q23 | 0.575781459 | 4.07E-32 | 1.34E-29 |
| DYNLRB1 | 20q11.22 | -0.575254407 | 4.76E-32 | 1.54E-29 |
| POP7 | 7q22.1 | -0.574534017 | 5.90E-32 | 1.88E-29 |
| LSM2 | 6p21.33 | -0.573390505 | 8.30E-32 | 2.60E-29 |
| SECISBP2L | 15q21.1 | 0.572662712 | 1.03E-31 | 3.14E-29 |
| UQCC3 | 11q12.3 | -0.572660719 | 1.03E-31 | 3.14E-29 |
| ARHGEF12 | 11q23.3 | 0.57189591 | 1.29E-31 | 3.88E-29 |
| NABP2 | 12q13.3 | -0.570734215 | 1.82E-31 | 5.38E-29 |
| DNAJB14 | 4q23 | 0.570136792 | 2.17E-31 | 6.32E-29 |
| ZNF791 | 19p13.13 | 0.569973351 | 2.28E-31 | 6.54E-29 |
| POLR2H | 3q27.1 | -0.569130524 | 2.92E-31 | 8.25E-29 |
| FAM214A | 15q21.2-q21.3 | 0.566786551 | 5.78E-31 | 1.61E-28 |
| LMO7 | 13q22.2 | 0.566576129 | 6.15E-31 | 1.69E-28 |
| PDS5B | 13q13.1 | 0.566317871 | 6.63E-31 | 1.80E-28 |
| IL6ST | 5q11.2 | 0.566194009 | 6.87E-31 | 1.84E-28 |
| INTS6 | 13q14.3 | 0.564403285 | 1.15E-30 | 3.02E-28 |
| ZEB1 | 10p11.22 | 0.564394173 | 1.16E-30 | 3.02E-28 |
| SNRPD2 | 19q13.32 | -0.563957384 | 1.31E-30 | 3.38E-28 |
| WWC2 | 4q35.1 | 0.563544512 | 1.48E-30 | 3.75E-28 |
| EPC2 | 2q23.1 | 0.562994863 | 1.73E-30 | 4.34E-28 |
| PQBP1 | Xp11.23 | -0.56276091 | 1.85E-30 | 4.58E-28 |
| TRPM7 | 15q21.2 | 0.562648723 | 1.91E-30 | 4.68E-28 |
| RRP1 | 21q22.3 | -0.562136762 | 2.21E-30 | 5.35E-28 |
| TSSC4 | 11p15.5 | -0.561660109 | 2.53E-30 | 6.06E-28 |
| PSMD13 | 11p15.5 | -0.561588924 | 2.59E-30 | 6.11E-28 |
| AKAP2 | 9q31.3 | 0.561538855 | 2.62E-30 | 6.12E-28 |
| AP1G1 | 16q22.2 | 0.561294788 | 2.81E-30 | 6.49E-28 |
| TOGARAM1 | 14q21.2 | 0.560881632 | 3.16E-30 | 7.22E-28 |
| SCNM1 | 1q21.3 | -0.560779126 | 3.26E-30 | 7.35E-28 |
| USPL1 | 13q12.3 | 0.560370241 | 3.66E-30 | 8.17E-28 |
| SYNE2 | 14q23.2 | 0.559907824 | 4.17E-30 | 9.21E-28 |
| DAAM1 | 14q23.1 | 0.558308445 | 6.56E-30 | 1.43E-27 |
| REL | 2p16.1 | 0.558083786 | 6.99E-30 | 1.51E-27 |
| SNF8 | 17q21.32 | -0.557714194 | 7.76E-30 | 1.66E-27 |
| FRYL | 4p11 | 0.557613294 | 7.99E-30 | 1.69E-27 |
| BIRC6 | 2p22.3 | 0.557536802 | 8.16E-30 | 1.71E-27 |
| RRP36 | 6p21.1 | -0.557472451 | 8.31E-30 | 1.72E-27 |
| RFXANK | 19p13.11 | -0.556730136 | 1.02E-29 | 2.10E-27 |
| LAMTOR4 | 7q22.1 | -0.555987536 | 1.26E-29 | 2.56E-27 |
| RPP21 | 6p22.1 | -0.555807012 | 1.33E-29 | 2.66E-27 |
| ARL6IP4 | 12q24.31 | -0.555646704 | 1.39E-29 | 2.76E-27 |
| ZKSCAN1 | 7q22.1 | 0.555524835 | 1.44E-29 | 2.83E-27 |
| UBE2S | 19q13.42 | -0.555289926 | 1.53E-29 | 2.99E-27 |
| GTF2A1 | 14q31.1 | 0.555090221 | 1.62E-29 | 3.13E-27 |
| TET2 | 4q24 | 0.55440638 | 1.96E-29 | 3.75E-27 |
| METTL14 | 4q26 | 0.553570568 | 2.48E-29 | 4.69E-27 |
| SERINC1 | 6q22.31 | 0.553454782 | 2.56E-29 | 4.80E-27 |
| DHX33 | 17p13.2 | 0.552784506 | 3.08E-29 | 5.70E-27 |
| MAP3K2 | 2q14.3 | 0.5527697 | 3.09E-29 | 5.70E-27 |
| UBXN4 | 2q21.3 | 0.552379647 | 3.44E-29 | 6.29E-27 |
| HEATR5B | 2p22.2 | 0.552048456 | 3.77E-29 | 6.80E-27 |
| CCNT1 | 12q13.11-q13.12 | 0.552029586 | 3.79E-29 | 6.80E-27 |
| CPSF4 | 7q22.1 | -0.551830346 | 4.01E-29 | 7.13E-27 |
| RPS21 | 20q13.33 | -0.550630455 | 5.58E-29 | 9.83E-27 |
| SPG11 | 15q21.1 | 0.549959325 | 6.71E-29 | 1.17E-26 |
| NAA10 | Xq28 | -0.549753174 | 7.10E-29 | 1.23E-26 |
| COMMD4 | 15q24.2 | -0.549483526 | 7.65E-29 | 1.31E-26 |
| ZDHHC20 | 13q12.11 | 0.549238601 | 8.18E-29 | 1.39E-26 |
| UBR3 | 2q31.1 | 0.548271107 | 1.07E-28 | 1.80E-26 |
| SLC25A39 | 17q21.31 | -0.547226969 | 1.42E-28 | 2.37E-26 |
| TSTD2 | 9q22.33 | 0.546875885 | 1.56E-28 | 2.59E-26 |
| DIS3 | 13q21.33 | 0.546398947 | 1.77E-28 | 2.92E-26 |
| JMJD1C | 10q21.3 | 0.546365063 | 1.79E-28 | 2.92E-26 |
| PIKFYVE | 2q34 | 0.546262557 | 1.84E-28 | 2.98E-26 |
| LIG4 | 13q33.3 | 0.546192796 | 1.88E-28 | 3.01E-26 |
| BCL7C | 16p11.2 | -0.545681974 | 2.15E-28 | 3.43E-26 |
| GBAP1 | 1q22 | -0.545285048 | 2.40E-28 | 3.79E-26 |
| MYSM1 | 1p32.1 | 0.545196494 | 2.46E-28 | 3.85E-26 |
| BRMS1 | 11q13.2 | -0.54510253 | 2.52E-28 | 3.92E-26 |
| POP5 | 12q24.31 | -0.544785616 | 2.74E-28 | 4.24E-26 |
| DPP8 | 15q22.31 | 0.544176843 | 3.23E-28 | 4.96E-26 |
| MINDY2 | 15q21.3-q22.1 | 0.54414239 | 3.26E-28 | 4.97E-26 |
| BEND3P3 | 10q22.3 | 0.54407975 | 3.32E-28 | 5.01E-26 |
| ZNF366 | 5q13.2|5q13.2 | 0.54328585 | 4.11E-28 | 6.16E-26 |
| MXD3 | 5q35.3 | -0.54280629 | 4.67E-28 | 6.95E-26 |
| FBL | 19q13.2 | -0.542281051 | 5.38E-28 | 7.95E-26 |
| UBR1 | 15q15.2 | 0.542202747 | 5.49E-28 | 8.05E-26 |
| SLTM | 15q22.1 | 0.542038776 | 5.74E-28 | 8.31E-26 |
| KLHDC3 | 6p21.1 | -0.542033328 | 5.75E-28 | 8.31E-26 |
| CIPC | 14q24.3 | 0.541924842 | 5.92E-28 | 8.49E-26 |
| ASXL2 | 2p23.3 | 0.541801265 | 6.12E-28 | 8.71E-26 |
| PCDHGB7 | 5q31.3 | 0.541433326 | 6.75E-28 | 9.54E-26 |
| PGP | 16p13.3 | -0.541392665 | 6.82E-28 | 9.58E-26 |
| RAD54L2 | 3p21.2 | 0.541230648 | 7.12E-28 | 9.93E-26 |
| LTN1 | 21q21.3 | 0.540916866 | 7.74E-28 | 1.07E-25 |
| NELFE | 6p21.33 | -0.540531898 | 8.58E-28 | 1.18E-25 |
| KPNA3 | 13q14.2 | 0.53999488 | 9.90E-28 | 1.35E-25 |
| SHPRH | 6q24.3 | 0.539940391 | 1.00E-27 | 1.36E-25 |
| TRIP11 | 14q32.12 | 0.539627282 | 1.09E-27 | 1.47E-25 |
| CLASP1 | 2q14.2-q14.3 | 0.539429958 | 1.15E-27 | 1.54E-25 |
| MAGI1 | 3p14.1 | 0.539079729 | 1.26E-27 | 1.68E-25 |
| UQCC2 | 6p21.31 | -0.538330011 | 1.54E-27 | 2.03E-25 |
| TIMM50 | 19q13.2 | -0.53810222 | 1.63E-27 | 2.14E-25 |
| CLOCK | 4q12 | 0.537908597 | 1.72E-27 | 2.24E-25 |
| POLK | 5q13.3 | 0.53776936 | 1.78E-27 | 2.31E-25 |
| USF3 | 3q13.2 | 0.537411443 | 1.96E-27 | 2.52E-25 |
| ATF2 | 2q31.1 | 0.537161157 | 2.09E-27 | 2.68E-25 |
| RNF6 | 13q12.13 | 0.537123856 | 2.11E-27 | 2.69E-25 |
| COPS6 | 7q22.1 | -0.536968427 | 2.20E-27 | 2.78E-25 |
| ERI3 | 1p34.1 | -0.536649196 | 2.39E-27 | 3.01E-25 |
| POLR2I | 19q13.12 | -0.536381541 | 2.57E-27 | 3.20E-25 |
| BCL2L12 | 19q13.33 | -0.53599572 | 2.84E-27 | 3.52E-25 |
| CDK8 | 13q12.13 | 0.535624857 | 3.13E-27 | 3.86E-25 |
| NEMF | 14q21.3 | 0.535589578 | 3.16E-27 | 3.87E-25 |
| ANAPC11 | 17q25.3 | -0.535512233 | 3.23E-27 | 3.93E-25 |
| PIK3C2A | 11p15.1 | 0.535456424 | 3.27E-27 | 3.96E-25 |
| RAPGEF6 | 5q31.1 | 0.53519902 | 3.50E-27 | 4.21E-25 |
| PPTC7 | 12q24.11 | 0.53514976 | 3.55E-27 | 4.24E-25 |
| ANKRD17 | 4q13.3 | 0.535070602 | 3.62E-27 | 4.30E-25 |
| DDI2 | 1p36.21 | 0.534987763 | 3.70E-27 | 4.35E-25 |
| SNRPB | 20p13 | -0.534984611 | 3.70E-27 | 4.35E-25 |
| TRAPPC11 | 4q35.1 | 0.534503117 | 4.20E-27 | 4.90E-25 |
| WDFY3 | 4q21.23 | 0.53416033 | 4.59E-27 | 5.33E-25 |
| ZNF281 | 1q32.1 | 0.533706133 | 5.17E-27 | 5.96E-25 |
| THAP8 | 19q13.12 | -0.533678266 | 5.20E-27 | 5.97E-25 |
| RAPGEF2 | 4q32.1 | 0.533423102 | 5.56E-27 | 6.35E-25 |
| ARL15 | 5q11.2 | 0.533275322 | 5.78E-27 | 6.56E-25 |
| PLEKHM3 | 2q33.3 | 0.532310057 | 7.42E-27 | 8.37E-25 |
| CHCHD1 | 10q22.2 | -0.531698722 | 8.69E-27 | 9.75E-25 |
| N4BP2 | 4p14 | 0.531608925 | 8.90E-27 | 9.93E-25 |
| LATS1 | 6q25.1 | 0.531505669 | 9.14E-27 | 1.01E-24 |
| WBP4 | 13q14.11 | 0.531299518 | 9.64E-27 | 1.06E-24 |
| RUNX1T1 | 8q21.3 | 0.531170539 | 9.96E-27 | 1.09E-24 |
| USO1 | 4q21.1 | 0.531143481 | 1.00E-26 | 1.10E-24 |
| ACOT8 | 20q13.12 | -0.531053219 | 1.03E-26 | 1.11E-24 |
| EPC1 | 10p11.22 | 0.530927079 | 1.06E-26 | 1.15E-24 |
| UHMK1 | 1q23.3 | 0.530556064 | 1.17E-26 | 1.25E-24 |
| RSPRY1 | 16q13 | 0.530427362 | 1.21E-26 | 1.29E-24 |
| ALG3 | 3q27.1 | -0.53005834 | 1.33E-26 | 1.41E-24 |
| C19ORF53 | 19p13.13 | -0.529462666 | 1.55E-26 | 1.63E-24 |
| CDC14C | 7p12.3 | 0.529350689 | 1.59E-26 | 1.66E-24 |
| NDFIP2 | 13q31.1 | 0.529348239 | 1.59E-26 | 1.66E-24 |
| KRTCAP2 | 1q22 | -0.52928869 | 1.62E-26 | 1.68E-24 |
| OSBP | 11q12.1 | 0.529249396 | 1.63E-26 | 1.69E-24 |
| KLHDC1 | 14q21.3 | 0.528764808 | 1.85E-26 | 1.90E-24 |
| RBM42 | 19q13.12 | -0.528564884 | 1.95E-26 | 1.99E-24 |
| LAGE3 | Xq28 | -0.52772889 | 2.41E-26 | 2.45E-24 |
| RPLP2 | 11p15.5 | -0.527404287 | 2.62E-26 | 2.65E-24 |
| MRPS17 | 7p11.2 | -0.527321997 | 2.67E-26 | 2.70E-24 |
| SMARCA2 | 9p24.3 | 0.527016472 | 2.89E-26 | 2.90E-24 |
| ATXN1L | 16q22.2 | 0.526918807 | 2.96E-26 | 2.96E-24 |
| ZKSCAN8 | 6p22.1 | 0.526825128 | 3.03E-26 | 3.01E-24 |
| TLCD1 | 17q11.2 | -0.526712693 | 3.12E-26 | 3.09E-24 |
| BOLA2 | 16p11.2 | -0.526566015 | 3.24E-26 | 3.19E-24 |
| ITPRID2 | 2q31.3 | 0.526179055 | 3.57E-26 | 3.50E-24 |
| POLR2A | 17p13.1 | 0.525818575 | 3.91E-26 | 3.81E-24 |
| TGFBRAP1 | 2q12.1-q12.2 | 0.525212028 | 4.56E-26 | 4.43E-24 |
| NDUFB11 | Xp11.3 | -0.525005255 | 4.81E-26 | 4.64E-24 |
| RAB3GAP1 | 2q21.3 | 0.524976317 | 4.84E-26 | 4.65E-24 |
| BDP1 | 5q13.2 | 0.524923355 | 4.91E-26 | 4.69E-24 |
| AP2S1 | 19q13.32 | -0.52489602 | 4.94E-26 | 4.70E-24 |
| KLHL8 | 4q22.1 | 0.524640894 | 5.27E-26 | 4.99E-24 |
| ELF2 | 4q31.1 | 0.524337647 | 5.69E-26 | 5.34E-24 |
| LEPROT | 1p31.3 | 0.524333376 | 5.69E-26 | 5.34E-24 |
| RNF111 | 15q22.1-q22.2 | 0.524263045 | 5.80E-26 | 5.41E-24 |
| NFKBIL1 | 6p21.33 | -0.523993967 | 6.20E-26 | 5.77E-24 |
| CUTA | 6p21.32 | -0.523693567 | 6.69E-26 | 6.19E-24 |
| SMG1 | 16p12.3 | 0.523655982 | 6.75E-26 | 6.22E-24 |
| NDUFS6 | 5p15.33 | -0.523357575 | 7.28E-26 | 6.68E-24 |
| DENND4A | 15q22.31 | 0.523101025 | 7.76E-26 | 7.09E-24 |
| COMMD9 | 11p13 | -0.522758769 | 8.46E-26 | 7.69E-24 |
| UFL1 | 6q16.1 | 0.522737983 | 8.50E-26 | 7.69E-24 |
| ZNF397 | 18q12.2 | 0.522294644 | 9.50E-26 | 8.56E-24 |
| LARP1B | 4q28.2 | 0.522276705 | 9.55E-26 | 8.56E-24 |
| SCAF11 | 12q12 | 0.522210077 | 9.71E-26 | 8.66E-24 |
| KIF27 | 9q21.32 | 0.521954276 | 1.03E-25 | 9.20E-24 |
| PSMB3 | 17q12 | -0.521757341 | 1.09E-25 | 9.62E-24 |
| NEK1 | 4q33 | 0.521606399 | 1.13E-25 | 9.94E-24 |
| NCAPH2 | 22q13.33 | -0.521587352 | 1.13E-25 | 9.95E-24 |
| CENPC | 4q13.2 | 0.521518445 | 1.15E-25 | 1.01E-23 |
| CSNK2B | 6p21.33 | -0.521499652 | 1.16E-25 | 1.01E-23 |
| SNRK | 3p22.1 | 0.52066793 | 1.43E-25 | 1.23E-23 |
| TIMM17B | Xp11.23 | -0.519935011 | 1.71E-25 | 1.48E-23 |
| TNRC6A | 16p12.1 | 0.519649133 | 1.84E-25 | 1.58E-23 |
| MRPL51 | 12p13.31 | -0.519450955 | 1.93E-25 | 1.65E-23 |
| MRPL11 | 11q13.2 | -0.519265874 | 2.02E-25 | 1.72E-23 |
| SURF2 | 9q34.2 | -0.519259895 | 2.02E-25 | 1.72E-23 |
| TOPORS | 9p21.1 | 0.519126352 | 2.09E-25 | 1.76E-23 |
| 8-Mar | 10q11.21-q11.22 | 0.5190956 | 2.11E-25 | 1.76E-23 |
| NBEAL1 | 2q33.2 | 0.519089336 | 2.11E-25 | 1.76E-23 |
| PTTG1 | 5q33.3 | -0.51908478 | 2.11E-25 | 1.76E-23 |
| SEC24B | 4q25 | 0.51861553 | 2.37E-25 | 1.97E-23 |
| ATM | 11q22.3 | 0.518397705 | 2.51E-25 | 2.07E-23 |
| LACC1 | 13q14.11 | 0.518258467 | 2.59E-25 | 2.13E-23 |
| TXNL4A | 18q23 | -0.517799753 | 2.90E-25 | 2.38E-23 |
| NR2C2AP | 19p13.11 | -0.517550036 | 3.09E-25 | 2.52E-23 |
| ZMYND11 | 10p15.3 | 0.517372075 | 3.23E-25 | 2.62E-23 |
| ATP5MC2 | 12q13.13 | -0.517241095 | 3.33E-25 | 2.70E-23 |
| ATE1 | 10q26.13 | 0.517173327 | 3.39E-25 | 2.73E-23 |
| C9ORF129 | 9q22.31 | 0.517156195 | 3.40E-25 | 2.73E-23 |
| UBL3 | 13q12.3 | 0.51714229 | 3.42E-25 | 2.73E-23 |
| DDX49 | 19p13.11 | -0.516980843 | 3.55E-25 | 2.83E-23 |
| KCTD18 | 2q33.1 | 0.516907132 | 3.62E-25 | 2.87E-23 |
| MTX1 | 1q22 | -0.516886346 | 3.64E-25 | 2.88E-23 |
| MIIP | 1p36.22 | -0.516859829 | 3.66E-25 | 2.88E-23 |
| CLTA | 9p13.3 | -0.516781241 | 3.73E-25 | 2.93E-23 |
| PPP4R3B | 2p16.1 | 0.516742126 | 3.77E-25 | 2.94E-23 |
| CDKN2AIP | 4q35.1 | 0.516358973 | 4.14E-25 | 3.22E-23 |
| TRAF6 | 11p12 | 0.516323169 | 4.18E-25 | 3.24E-23 |
| SNRPF | 12q23.1 | -0.516075088 | 4.44E-25 | 3.43E-23 |
| PRELID1 | 5q35.3 | -0.515789495 | 4.76E-25 | 3.66E-23 |
| TMEM184C | 4q31.23 | 0.515725998 | 4.84E-25 | 3.71E-23 |
| NHLRC2 | 10q25.3 | 0.515636057 | 4.94E-25 | 3.77E-23 |
| PTDSS2 | 11p15.5 | -0.515601282 | 4.99E-25 | 3.79E-23 |
| RPLP1 | 15q23 | -0.515070528 | 5.68E-25 | 4.30E-23 |
| RORA | 15q22.2 | 0.514644559 | 6.30E-25 | 4.76E-23 |
| RGPD3 | 2q12.2 | 0.514527816 | 6.48E-25 | 4.88E-23 |
| KIAA2026 | 9p24.1 | 0.514456346 | 6.60E-25 | 4.94E-23 |
| ZMYM2 | 13q12.11 | 0.514257883 | 6.92E-25 | 5.17E-23 |
| DPY19L3 | 19q13.11 | 0.514093019 | 7.21E-25 | 5.36E-23 |
| PYM1 | 12q13.2 | -0.513723428 | 7.89E-25 | 5.82E-23 |
| CENPM | 22q13.2 | -0.513723143 | 7.89E-25 | 5.82E-23 |
| MEF2A | 15q26.3 | 0.513583906 | 8.16E-25 | 6.00E-23 |
| COL4A3BP | 5q13.3 | 0.51326215 | 8.82E-25 | 6.47E-23 |
| COMMD7 | 20q11.21 | -0.51306625 | 9.25E-25 | 6.76E-23 |
| NEDD8 | 14q12 | -0.512659964 | 1.02E-24 | 7.43E-23 |
| MAPK8 | 10q11.22 | 0.51260629 | 1.03E-24 | 7.49E-23 |
| KIAA0754 | 1p34.3 | 0.512596715 | 1.04E-24 | 7.49E-23 |
| SOS2 | 14q21.3 | 0.512573082 | 1.04E-24 | 7.51E-23 |
| FAM122A | 9q21.11 | 0.512195803 | 1.14E-24 | 8.19E-23 |
| B3GAT3 | 11q12.3 | -0.512121486 | 1.16E-24 | 8.31E-23 |
| LAMTOR1 | 11q13.4 | -0.512017556 | 1.19E-24 | 8.50E-23 |
| PARD3B | 2q33.3 | 0.51184504 | 1.24E-24 | 8.83E-23 |
| DOCK1 | 10q26.2 | 0.511793751 | 1.26E-24 | 8.91E-23 |
| ETV3 | 1q23.1 | 0.511717236 | 1.28E-24 | 9.04E-23 |
| SMARCAD1 | 4q22.3 | 0.511362123 | 1.40E-24 | 9.82E-23 |
| TMEM160 | 19q13.32 | -0.511169033 | 1.46E-24 | 1.02E-22 |
| CLCN3 | 4q33 | 0.511119489 | 1.48E-24 | 1.03E-22 |
| UBA52 | 19p13.11 | -0.510940388 | 1.55E-24 | 1.08E-22 |
| PCNX1 | 14q24.2 | 0.510642836 | 1.66E-24 | 1.15E-22 |
| CARNMT1 | 9q21.13 | 0.510349912 | 1.78E-24 | 1.23E-22 |
| ATG2B | 14q32.2 | 0.510327345 | 1.79E-24 | 1.23E-22 |
| UBE2M | 19q13.43 | -0.510105533 | 1.89E-24 | 1.30E-22 |
| CLPX | 15q22.31 | 0.510012423 | 1.93E-24 | 1.32E-22 |
| VPS13C | 15q22.2 | 0.509673584 | 2.10E-24 | 1.43E-22 |
| ADAT1 | 16q23.1 | 0.509480531 | 2.20E-24 | 1.49E-22 |
| SMAD1 | 4q31.21 | 0.509102112 | 2.41E-24 | 1.63E-22 |
| BRI3 | 7q21.3 | -0.508996474 | 2.47E-24 | 1.66E-22 |
| PCDHGB2 | 5q31.3 | 0.508660828 | 2.68E-24 | 1.80E-22 |
| TGFBR2 | 3p24.1 | 0.50843867 | 2.82E-24 | 1.89E-22 |
| PDCD5 | 19q13.11 | -0.508412759 | 2.84E-24 | 1.89E-22 |
| MRPL52 | 14q11.2 | -0.508377167 | 2.86E-24 | 1.90E-22 |
| HIVEP1 | 6p24.1 | 0.508354103 | 2.88E-24 | 1.91E-22 |
| ABHD12 | 20p11.21 | -0.508271528 | 2.94E-24 | 1.94E-22 |
| MZT2B | 2q21.1 | -0.507909625 | 3.20E-24 | 2.11E-22 |
| MRPL53 | 2p13.1 | -0.50773508 | 3.34E-24 | 2.19E-22 |
| CDKN2AIPNL | 5q31.1 | -0.507245613 | 3.75E-24 | 2.45E-22 |
| IL1R1 | 2q11.2-q12.1 | 0.507136558 | 3.85E-24 | 2.51E-22 |
| PAFAH1B2 | 11q23.3 | 0.507037469 | 3.94E-24 | 2.56E-22 |
| NHP2 | 5q35.3 | -0.506954325 | 4.02E-24 | 2.61E-22 |
| ZNF280D | 15q21.3 | 0.506736785 | 4.24E-24 | 2.73E-22 |
| EXOC6B | 2p13.2 | 0.506590465 | 4.38E-24 | 2.82E-22 |
| NR2C2 | 3p25.1 | 0.506547718 | 4.43E-24 | 2.84E-22 |
| MRPL55 | 1q42.13 | -0.506218844 | 4.79E-24 | 3.06E-22 |
| ACER2 | 9p22.1 | 0.506085662 | 4.94E-24 | 3.15E-22 |
| PRKG1 | 10q11.23-q21.1 | 0.506058314 | 4.98E-24 | 3.16E-22 |
| ELK3 | 12q23.1 | 0.505782054 | 5.31E-24 | 3.37E-22 |
| KLHL20 | 1q25.1 | 0.505564514 | 5.59E-24 | 3.53E-22 |
| GGCT | 7p14.3 | -0.505475106 | 5.71E-24 | 3.60E-22 |
| HRAS | 11p15.5 | -0.505457061 | 5.74E-24 | 3.60E-22 |
| TANK | 2q24.2 | 0.505433249 | 5.77E-24 | 3.61E-22 |
| RPL27A | 11p15.4 | -0.505368613 | 5.86E-24 | 3.65E-22 |
| WDR11 | 10q26.12 | 0.505015252 | 6.37E-24 | 3.96E-22 |
| ZFPL1 | 11q13.1 | -0.50499048 | 6.41E-24 | 3.97E-22 |
| RSF1 | 11q14.1 | 0.504892529 | 6.56E-24 | 4.05E-22 |
| TMF1 | 3p14.1 | 0.504593838 | 7.04E-24 | 4.34E-22 |
| FRMD3 | 9q21.32 | 0.504549018 | 7.11E-24 | 4.37E-22 |
| FAT4 | 4q28.1 | 0.504361919 | 7.43E-24 | 4.55E-22 |
| MRPS24 | 7p13 | -0.504309384 | 7.53E-24 | 4.59E-22 |
| TOR1AIP2 | 1q25.2 | 0.504225386 | 7.68E-24 | 4.67E-22 |
| LNPK | 2q31.1 | 0.504185522 | 7.75E-24 | 4.70E-22 |
| TCF12 | 15q21.3 | 0.504135693 | 7.84E-24 | 4.74E-22 |
| PSMB4 | 1q21.3 | -0.504114053 | 7.88E-24 | 4.75E-22 |
| LNX2 | 13q12.2 | 0.504104656 | 7.90E-24 | 4.75E-22 |
| LSM4 | 19p13.11 | -0.504081877 | 7.94E-24 | 4.76E-22 |
| YTHDC1 | 4q13.2 | 0.503934276 | 8.22E-24 | 4.91E-22 |
| GOLIM4 | 3q26.2 | 0.503516955 | 9.07E-24 | 5.40E-22 |
| SPTBN1 | 2p16.2 | 0.503508413 | 9.09E-24 | 5.40E-22 |
| TRUB1 | 10q25.3 | 0.503298845 | 9.55E-24 | 5.66E-22 |
| ANKRD50 | 4q28.1 | 0.502803399 | 1.07E-23 | 6.34E-22 |
| SNRPA | 19q13.2 | -0.502619457 | 1.12E-23 | 6.60E-22 |
| ANKRD36BP1 | 1q24.2 | 0.502370046 | 1.19E-23 | 6.97E-22 |
| USP38 | 4q31.21 | 0.502193488 | 1.24E-23 | 7.25E-22 |
| COPRS | 17q11.2 | -0.502019512 | 1.29E-23 | 7.53E-22 |
| LCOR | 10q24.1 | 0.501798839 | 1.36E-23 | 7.90E-22 |
| SACM1L | 3p21.31 | 0.501666044 | 1.40E-23 | 8.13E-22 |
| PRDX5 | 11q13.1 | -0.501594966 | 1.42E-23 | 8.24E-22 |
| RNF181 | 2p11.2 | -0.501556242 | 1.44E-23 | 8.29E-22 |
| HECTD1 | 14q12 | 0.501199463 | 1.56E-23 | 8.99E-22 |
| TAF10 | 11p15.4 | -0.501095854 | 1.60E-23 | 9.18E-22 |
| DNAJC27 | 2p23.3 | 0.500866888 | 1.69E-23 | 9.66E-22 |
| KLHL11 | 17q21.2 | 0.500484022 | 1.85E-23 | 1.05E-21 |
| NCOA2 | 8q13.3 | 0.500424404 | 1.87E-23 | 1.06E-21 |
| MRPL23 | 11p15.5 | -0.500401055 | 1.88E-23 | 1.07E-21 |
| ZBTB38 | 3q23 | 0.500138241 | 2.00E-23 | 1.13E-21 |
| CELF1 | 11p11.2 | 0.500108236 | 2.01E-23 | 1.14E-21 |