

Table S7. Significant results obtained in the gene-based meta-analysis of cocaine dependence and attention deficit/hyperactivity disorder (ADHD)

| EntrezID | Gene symbol | CHR | START | STOP | NSNPS | N | ZSTAT | Combined P-value | P-value ADHD | P-value COCA |
|---------------|---------------|----------|-----------------|-----------------|------------|--------------|-------------|------------------|-----------------|-----------------|
| 6487 | ST3GAL3 | 1 | 44173204 | 44396837 | 518 | 59056 | 6.86 | 3.36E-12 | 5.82E-12 | 8.41E-02 |
| 9682 | KDM4A | 1 | 44115797 | 44171189 | 74 | 59115 | 6.38 | 8.97E-11 | 3.66E-11 | 2.53E-01 |
| 5792 | PTPRF | 1 | 43991708 | 44089343 | 240 | 59077 | 5.92 | 1.64E-09 | 5.42E-10 | 3.19E-01 |
| 7075 | TIE1 | 1 | 43766566 | 43788781 | 32 | 58177 | 5.90 | 1.85E-09 | 2.01E-08 | 1.51E-02 |
| 1006 | CDH8 | 16 | 61681169 | 62070939 | 835 | 59057 | 5.83 | 2.77E-09 | 1.09E-08 | 4.93E-02 |
| 80031 | SEMA6D | 15 | 47476403 | 48066420 | 1540 | 59060 | 5.81 | 3.16E-09 | 3.83E-10 | 5.11E-01 |
| 4352 | MPL | 1 | 43803475 | 43820135 | 13 | 59604 | 5.51 | 1.75E-08 | 4.79E-08 | 7.43E-02 |
| 4126 | MANBA | 4 | 103552643 | 103682151 | 216 | 58893 | 5.51 | 1.76E-08 | 6.82E-08 | 5.18E-02 |
| 22986 | SORCS3 | 10 | 106400859 | 107024993 | 1864 | 59340 | 5.48 | 2.15E-08 | 5.24E-09 | 4.19E-01 |
| 23334 | SZT2 | 1 | 43855556 | 43919918 | 88 | 58521 | 5.42 | 2.91E-08 | 1.29E-08 | 3.11E-01 |
| 991 | CDC20 | 1 | 43824626 | 43828874 | 6 | 57440 | 5.38 | 3.66E-08 | 6.34E-08 | 1.15E-01 |
| 4208 | MEF2C | 5 | 88014058 | 88199922 | 344 | 58906 | 5.32 | 5.17E-08 | 7.87E-08 | 1.33E-01 |
| 1848 | DUSP6 | 12 | 89741837 | 89746296 | 21 | 59291 | 5.26 | 7.24E-08 | 2.24E-09 | 8.06E-01 |
| 6536 | SLC6A9 | 1 | 44462155 | 44497171 | 64 | 55667 | 5.05 | 2.21E-07 | 9.49E-07 | 4.70E-02 |
| 55367 | PIDD1 | 11 | 799179 | 809872 | 31 | 55077 | 4.95 | 3.69E-07 | 5.30E-07 | 1.46E-01 |
| 386724 | AMIGO3 | 3 | 49754267 | 49757238 | 1 | 59670 | 4.93 | 4.03E-07 | 1.97E-05 | 6.70E-04 |
| 64834 | ELOVL1 | 1 | 43829068 | 43833745 | 4 | 51706 | 4.92 | 4.24E-07 | 1.26E-06 | 7.24E-02 |
| 149473 | CCDC24 | 1 | 44457280 | 44462200 | 8 | 58973 | 4.89 | 5.13E-07 | 2.12E-06 | 4.92E-02 |
| 8927 | BSN | 3 | 49591922 | 49708982 | 162 | 59054 | 4.88 | 5.42E-07 | 1.85E-05 | 1.38E-03 |
| 81888 | HYI | 1 | 43916674 | 43919938 | 6 | 56506 | 4.78 | 8.81E-07 | 3.28E-07 | 4.09E-01 |
| 93986 | FOXP2 | 7 | 113726365 | 114333827 | 914 | 58176 | 4.54 | 2.80E-06 | 1.25E-06 | 3.96E-01 |

*Gene coordinates based on GRCh37/hg19. NSNPs: Number of SNPs per region included in the gene-based analysis. N: Number of individuals considered in the analysis. ZSTAT: the Z-value for the gene. Combined P: p-value obtained in the gene-based meta-analysis of cocaine dependence and ADHD. P ADHD/COCA: p-value of the gene-based in ADHD/COCA sample alone. In bold, new associated genes.

Table S8. Significant results in the gene-based meta-analysis of cocaine dependence and schizophrenia (SCZ)

| EntrezID | Gene symbol | CHR | START | STOP | NSNPS | N | ZSTAT | Combined P-value | P-value SCZ | P-value COCA |
|----------|-------------|-----|-----------|-----------|-------|--------|-------|------------------|-------------|--------------|
| 8368 | HIST1H4L | 6 | 27840926 | 27841289 | 1 | 152369 | 10.56 | 2.18E-26 | 4.85E-26 | 7.45E-05 |
| 7726 | TRIM26 | 6 | 30152232 | 30181271 | 132 | 152260 | 9.12 | 3.77E-20 | 4.21E-20 | 1.60E-01 |
| 7916 | PRRC2A | 6 | 31588450 | 31605554 | 71 | 152194 | 8.82 | 5.98E-19 | 1.16E-18 | 1.04E-01 |
| 775 | CACNA1C | 12 | 2079952 | 2807115 | 1988 | 152213 | 8.48 | 1.16E-17 | 2.31E-18 | 5.14E-01 |
| 80317 | ZKSCAN3 | 6 | 28317691 | 28336954 | 71 | 152273 | 8.76 | 9.34E-19 | 2.94E-18 | 6.34E-02 |
| 8341 | HIST1H2BN | 6 | 27805544 | 27821533 | 29 | 152323 | 9.06 | 6.49E-20 | 7.32E-18 | 2.48E-04 |
| 1806 | DPYD | 1 | 97543299 | 98386615 | 2138 | 152277 | 8.64 | 2.82E-18 | 1.05E-17 | 5.29E-02 |
| 4439 | MSH5 | 6 | 31707725 | 31730455 | 60 | 152288 | 8.51 | 9.00E-18 | 1.42E-17 | 1.29E-01 |
| 6925 | TCF4 | 18 | 52889562 | 53303252 | 701 | 152270 | 7.97 | 8.26E-16 | 1.75E-17 | 9.22E-01 |
| 64288 | ZNF323 | 6 | 28292514 | 28321972 | 102 | 152237 | 8.50 | 9.09E-18 | 2.80E-17 | 6.60E-02 |
| 11074 | TRIM31 | 6 | 30070674 | 30080867 | 81 | 152323 | 8.40 | 2.21E-17 | 3.86E-17 | 1.19E-01 |
| 11120 | BTN2A1 | 6 | 26458132 | 26476849 | 77 | 152286 | 8.83 | 5.05E-19 | 5.50E-17 | 2.23E-04 |
| 81697 | OR2B2 | 6 | 27878963 | 27880174 | 4 | 152366 | 8.64 | 2.73E-18 | 2.00E-16 | 4.69E-04 |
| 11118 | BTN3A2 | 6 | 26365387 | 26378548 | 100 | 152363 | 8.74 | 1.17E-18 | 2.48E-16 | 4.72E-05 |
| 8359 | HIST1H4A | 6 | 26021907 | 26022278 | 1 | 152378 | 8.27 | 6.87E-17 | 1.28E-15 | 5.28E-03 |
| 9753 | ZSCAN12 | 6 | 28346598 | 28367544 | 71 | 152227 | 8.16 | 1.66E-16 | 1.34E-15 | 1.89E-02 |
| 387032 | ZKSCAN4 | 6 | 28212404 | 28227030 | 36 | 152300 | 8.02 | 5.50E-16 | 1.86E-15 | 6.06E-02 |
| 3009 | HIST1H1B | 6 | 27834570 | 27835359 | 4 | 152335 | 8.37 | 2.86E-17 | 1.90E-15 | 4.67E-04 |
| 80863 | PRRT1 | 6 | 32116140 | 32119720 | 1 | 152364 | 7.42 | 6.01E-14 | 2.56E-15 | 8.82E-01 |
| 119032 | C10orf32 | 10 | 104613967 | 104624718 | 27 | 152301 | 7.50 | 3.08E-14 | 9.33E-15 | 4.90E-01 |
| 7407 | VARS | 6 | 31745295 | 31763712 | 38 | 152256 | 7.52 | 2.84E-14 | 1.14E-14 | 4.21E-01 |
| 7741 | ZNF187 | 6 | 28234788 | 28246001 | 18 | 152366 | 7.72 | 5.89E-15 | 1.31E-14 | 9.89E-02 |
| 57412 | AS3MT | 10 | 104629183 | 104661656 | 121 | 152289 | 7.45 | 4.73E-14 | 1.63E-14 | 4.62E-01 |
| 80737 | VWA7 | 6 | 31733178 | 31745108 | 33 | 152194 | 7.49 | 3.48E-14 | 2.44E-14 | 2.96E-01 |
| 84547 | PGBD1 | 6 | 28249314 | 28270326 | 56 | 152363 | 7.66 | 9.39E-15 | 2.61E-14 | 7.72E-02 |
| 7746 | ZNF193 | 6 | 28193029 | 28201265 | 27 | 152216 | 7.62 | 1.23E-14 | 2.86E-14 | 9.54E-02 |
| 57819 | LSM2 | 6 | 31765169 | 31774761 | 32 | 152293 | 7.46 | 4.37E-14 | 3.03E-14 | 2.96E-01 |
| 63940 | GPSM3 | 6 | 32158543 | 32163300 | 10 | 152357 | 7.44 | 5.04E-14 | 3.80E-14 | 2.77E-01 |
| 5089 | PBX2 | 6 | 32152510 | 32157963 | 15 | 152177 | 7.26 | 1.88E-13 | 4.11E-14 | 5.97E-01 |

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|--------|-----------|----|-----------|-----------|------|--------|------|----------|----------|----------|
| 7917 | BAG6 | 6 | 31606805 | 31620953 | 51 | 152124 | 7.59 | 1.65E-14 | 4.32E-14 | 8.32E-02 |
| 27086 | FOXP1 | 3 | 71003865 | 71633140 | 1322 | 152153 | 7.54 | 2.38E-14 | 1.02E-13 | 4.44E-02 |
| 10475 | TRIM38 | 6 | 25962917 | 25987557 | 43 | 152256 | 7.63 | 1.18E-14 | 1.23E-13 | 1.16E-02 |
| 8356 | HIST1H3J | 6 | 27858093 | 27858570 | 1 | 152376 | 7.65 | 1.04E-14 | 1.43E-13 | 7.32E-03 |
| 10554 | AGPAT1 | 6 | 32135983 | 32145888 | 22 | 152357 | 7.09 | 6.94E-13 | 1.59E-13 | 5.92E-01 |
| 389376 | SFTA2 | 6 | 30899127 | 30899952 | 9 | 152376 | 7.22 | 2.69E-13 | 1.92E-13 | 2.99E-01 |
| 80864 | EGFL8 | 6 | 32132382 | 32136062 | 14 | 152358 | 7.11 | 5.95E-13 | 2.05E-13 | 4.86E-01 |
| 3305 | HSPA1L | 6 | 31777396 | 31790093 | 34 | 152352 | 7.24 | 2.28E-13 | 2.57E-13 | 2.05E-01 |
| 4855 | NOTCH4 | 6 | 32162620 | 32191844 | 151 | 152305 | 7.25 | 2.09E-13 | 2.65E-13 | 1.84E-01 |
| 7745 | ZNF192 | 6 | 28109688 | 28127250 | 51 | 152284 | 7.49 | 3.50E-14 | 3.00E-13 | 1.56E-02 |
| 6048 | RNF5 | 6 | 32146162 | 32148570 | 11 | 152223 | 6.89 | 2.85E-12 | 3.05E-13 | 7.89E-01 |
| 22978 | NT5C2 | 10 | 104847774 | 104953063 | 254 | 152295 | 7.04 | 9.37E-13 | 3.60E-13 | 4.65E-01 |
| 10786 | SLC17A3 | 6 | 25845328 | 25874471 | 89 | 152313 | 7.66 | 9.62E-15 | 4.06E-13 | 7.48E-04 |
| 8343 | HIST1H2BF | 6 | 26199787 | 26200216 | 5 | 152247 | 7.53 | 2.54E-14 | 5.58E-13 | 2.78E-03 |
| 8354 | HIST1H3I | 6 | 27839623 | 27840099 | 1 | 152372 | 7.44 | 4.93E-14 | 6.01E-13 | 8.54E-03 |
| 8911 | CACNA1I | 22 | 39966758 | 40085740 | 273 | 152186 | 6.91 | 2.41E-12 | 6.53E-13 | 5.74E-01 |
| 8340 | HIST1H2BL | 6 | 27775257 | 27775709 | 2 | 152377 | 7.58 | 1.71E-14 | 6.74E-13 | 8.55E-04 |
| 1460 | CSNK2B | 6 | 31632995 | 31637844 | 19 | 152195 | 7.14 | 4.81E-13 | 7.18E-13 | 1.60E-01 |
| 3017 | HIST1H2BD | 6 | 26157419 | 26171577 | 22 | 152139 | 7.83 | 2.50E-15 | 7.24E-13 | 4.49E-06 |
| 80345 | ZSCAN16 | 6 | 28092334 | 28097864 | 13 | 152350 | 7.37 | 8.72E-14 | 7.55E-13 | 1.51E-02 |
| 5987 | TRIM27 | 6 | 28870779 | 28891768 | 62 | 152180 | 7.12 | 5.26E-13 | 7.60E-13 | 1.65E-01 |
| 10919 | EHMT2 | 6 | 31847536 | 31865464 | 54 | 152280 | 6.92 | 2.28E-12 | 1.05E-12 | 4.28E-01 |
| 783 | CACNB2 | 10 | 18429373 | 18830688 | 1633 | 152247 | 6.61 | 1.91E-11 | 1.21E-12 | 8.93E-01 |
| 135656 | DPCR1 | 6 | 30908777 | 30921998 | 39 | 152283 | 7.17 | 3.85E-13 | 1.41E-12 | 5.42E-02 |
| 8348 | HIST1H2BO | 6 | 27861203 | 27926100 | 117 | 152318 | 7.11 | 5.61E-13 | 1.82E-12 | 6.41E-02 |
| 177 | AGER | 6 | 32148745 | 32152099 | 13 | 152089 | 6.69 | 1.11E-11 | 1.84E-12 | 7.21E-01 |
| 8332 | HIST1H2AL | 6 | 27833107 | 27833576 | 2 | 152376 | 7.34 | 1.10E-13 | 2.05E-12 | 3.64E-03 |
| 54805 | CNNM2 | 10 | 104678075 | 104838344 | 412 | 152311 | 6.77 | 6.39E-12 | 2.48E-12 | 4.82E-01 |
| 3122 | HLA-DRA | 6 | 32407619 | 32412823 | 62 | 152335 | 6.94 | 1.90E-12 | 2.99E-12 | 1.53E-01 |
| 3117 | HLA-DQA1 | 6 | 32605169 | 32612152 | 6 | 151269 | 6.85 | 3.63E-12 | 3.19E-12 | 2.92E-01 |
| 79038 | ZFYVE21 | 14 | 104182081 | 104200005 | 41 | 152065 | 7.13 | 5.19E-13 | 3.63E-12 | 1.98E-02 |
| 80736 | SLC44A4 | 6 | 31830969 | 31846823 | 69 | 152187 | 6.68 | 1.18E-11 | 4.39E-12 | 5.06E-01 |
| 26051 | PPP1R16B | 20 | 37434348 | 37551667 | 286 | 152218 | 7.02 | 1.13E-12 | 4.77E-12 | 4.39E-02 |

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|--------|-----------|----|-----------|-----------|------|--------|------|----------|----------|----------|
| 114821 | SCAND3 | 6 | 28539407 | 28555112 | 27 | 152068 | 6.59 | 2.19E-11 | 5.05E-12 | 6.51E-01 |
| 23564 | DDAH2 | 6 | 31694817 | 31698039 | 7 | 152361 | 6.90 | 2.56E-12 | 5.97E-12 | 9.81E-02 |
| 129450 | TYW5 | 2 | 200793634 | 200820459 | 52 | 152300 | 6.55 | 2.90E-11 | 7.67E-12 | 6.06E-01 |
| 8352 | HIST1H3C | 6 | 26045639 | 26046097 | 3 | 152374 | 7.03 | 1.02E-12 | 8.34E-12 | 1.54E-02 |
| 222696 | ZSCAN23 | 6 | 28399373 | 28411279 | 34 | 152344 | 6.74 | 8.18E-12 | 8.55E-12 | 2.34E-01 |
| 84334 | APOPT1 | 14 | 104029299 | 104057236 | 60 | 152178 | 6.85 | 3.58E-12 | 9.21E-12 | 8.68E-02 |
| 346171 | ZFP57 | 6 | 29640169 | 29644931 | 31 | 152275 | 6.72 | 8.87E-12 | 1.00E-11 | 2.19E-01 |
| 7148 | TNXB | 6 | 32008932 | 32077151 | 188 | 152176 | 6.61 | 1.96E-11 | 1.08E-11 | 4.04E-01 |
| 3303 | HSPA1A | 6 | 31782952 | 31785719 | 5 | 152342 | 6.80 | 5.21E-12 | 1.08E-11 | 1.14E-01 |
| 9374 | PPT2 | 6 | 32121229 | 32131458 | 30 | 152304 | 6.64 | 1.58E-11 | 1.16E-11 | 3.20E-01 |
| 55937 | APOM | 6 | 31620187 | 31625987 | 14 | 152239 | 6.69 | 1.11E-11 | 2.06E-11 | 1.30E-01 |
| 8525 | DGKZ | 11 | 46354455 | 46402104 | 54 | 151972 | 6.86 | 3.46E-12 | 2.19E-11 | 2.20E-02 |
| 1586 | CYP17A1 | 10 | 104590288 | 104597290 | 20 | 152355 | 6.37 | 9.49E-11 | 2.53E-11 | 6.18E-01 |
| 4482 | MSRA | 8 | 9911830 | 10286401 | 1584 | 152230 | 6.62 | 1.79E-11 | 2.75E-11 | 1.62E-01 |
| 3106 | HLA-B | 6 | 31321649 | 31324989 | 180 | 152099 | 6.79 | 5.49E-12 | 2.99E-11 | 2.85E-02 |
| 3077 | HFE | 6 | 26087422 | 26096438 | 23 | 152293 | 6.69 | 1.15E-11 | 3.05E-11 | 8.39E-02 |
| 554223 | LOC554223 | 6 | 29759683 | 29765584 | 130 | 152362 | 6.35 | 1.07E-10 | 3.28E-11 | 5.82E-01 |
| 57605 | PITPNM2 | 12 | 123468027 | 123635376 | 147 | 152128 | 6.29 | 1.62E-10 | 3.46E-11 | 6.96E-01 |
| 79692 | ZNF322 | 6 | 26634611 | 26659980 | 79 | 152224 | 7.03 | 1.00E-12 | 3.62E-11 | 6.17E-04 |
| 81797 | OR12D3 | 6 | 29341200 | 29343068 | 11 | 152367 | 6.52 | 3.51E-11 | 3.72E-11 | 2.37E-01 |
| 152330 | CNTN4 | 3 | 2140550 | 3099645 | 4412 | 152191 | 6.46 | 5.24E-11 | 5.00E-11 | 2.66E-01 |
| 26010 | SPATS2L | 2 | 201170604 | 201346986 | 414 | 152257 | 6.64 | 1.53E-11 | 5.11E-11 | 6.07E-02 |
| 55626 | AMBRA1 | 11 | 46417962 | 46615619 | 159 | 151996 | 6.66 | 1.35E-11 | 5.60E-11 | 4.29E-02 |
| 7718 | ZNF165 | 6 | 28048482 | 28057341 | 25 | 152361 | 6.70 | 1.04E-11 | 6.15E-11 | 2.52E-02 |
| 57688 | ZSWIM6 | 5 | 60628100 | 60841999 | 328 | 152241 | 6.51 | 3.69E-11 | 6.35E-11 | 1.44E-01 |
| 203062 | TSNARE1 | 8 | 143293441 | 143484543 | 704 | 152163 | 6.61 | 1.89E-11 | 6.80E-11 | 5.39E-02 |
| 50854 | C6orf48 | 6 | 31802693 | 31807541 | 20 | 152294 | 6.42 | 6.92E-11 | 7.91E-11 | 2.24E-01 |
| 10665 | C6orf10 | 6 | 32260475 | 32339705 | 680 | 152313 | 6.40 | 7.65E-11 | 8.06E-11 | 2.43E-01 |
| 534 | ATP6V1G2 | 6 | 31512228 | 31514625 | 11 | 152072 | 6.33 | 1.23E-10 | 9.47E-11 | 3.28E-01 |
| 6568 | SLC17A1 | 6 | 25783125 | 25832287 | 144 | 152298 | 6.99 | 1.42E-12 | 1.01E-10 | 9.57E-05 |
| 205327 | C2orf69 | 2 | 200775979 | 200792996 | 47 | 152259 | 6.23 | 2.32E-10 | 1.03E-10 | 4.88E-01 |
| 8831 | SYNGAP1 | 6 | 33387847 | 33421466 | 55 | 152023 | 5.97 | 1.16E-09 | 1.48E-10 | 8.44E-01 |
| 64919 | BCL11B | 14 | 99635624 | 99738514 | 264 | 152120 | 6.22 | 2.43E-10 | 1.67E-10 | 3.64E-01 |

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|-----------|------------|----|-----------|-----------|-------|--------|------|----------|----------|----------|
| 10806 | SDCCAG8 | 1 | 243419307 | 243663393 | 416 | 152258 | 6.56 | 2.64E-11 | 1.70E-10 | 2.05E-02 |
| 780 | DDR1 | 6 | 30850694 | 30867933 | 58 | 152329 | 6.29 | 1.57E-10 | 1.74E-10 | 2.34E-01 |
| 91574 | C12orf65 | 12 | 123717844 | 123742651 | 76 | 152168 | 5.85 | 2.49E-09 | 1.83E-10 | 9.26E-01 |
| 23368 | PPP1R13B | 14 | 104200088 | 104315116 | 256 | 152250 | 6.44 | 5.80E-11 | 2.17E-10 | 5.02E-02 |
| 25843 | MOB4 | 2 | 198380295 | 198418423 | 42 | 152146 | 6.08 | 5.90E-10 | 2.36E-10 | 5.36E-01 |
| 9529 | BAG5 | 14 | 104022881 | 104029151 | 11 | 152318 | 6.29 | 1.55E-10 | 3.06E-10 | 1.23E-01 |
| 3769 | KCNJ13 | 2 | 233630512 | 233641275 | 28 | 152323 | 6.15 | 3.77E-10 | 3.06E-10 | 3.17E-01 |
| 5740 | PTGIS | 20 | 48120411 | 48184707 | 111 | 152024 | 5.92 | 1.60E-09 | 3.68E-10 | 7.16E-01 |
| 7517 | XRCC3 | 14 | 104163945 | 104181823 | 31 | 152291 | 6.23 | 2.31E-10 | 3.80E-10 | 1.54E-01 |
| 25791 | NGEF | 2 | 233743396 | 233877951 | 573 | 152206 | 6.44 | 5.89E-11 | 4.08E-10 | 1.73E-02 |
| 100529241 | HSPE1-MOB4 | 2 | 198364721 | 198418423 | 59 | 152160 | 6.00 | 9.70E-10 | 4.24E-10 | 5.15E-01 |
| 8087 | FXR1 | 3 | 180630096 | 180700541 | 107 | 152224 | 6.02 | 8.89E-10 | 4.53E-10 | 4.64E-01 |
| 2242 | FES | 15 | 91427665 | 91439006 | 31 | 152145 | 6.33 | 1.25E-10 | 5.07E-10 | 4.31E-02 |
| 29777 | ABT1 | 6 | 26597171 | 26600278 | 14 | 152363 | 6.47 | 4.82E-11 | 5.26E-10 | 7.21E-03 |
| 56658 | TRIM39 | 6 | 30294227 | 30311506 | 41 | 152360 | 6.18 | 3.21E-10 | 5.36E-10 | 1.52E-01 |
| 8379 | MAD1L1 | 7 | 1855428 | 2272583 | 1745 | 152229 | 6.12 | 4.77E-10 | 6.19E-10 | 2.04E-01 |
| 9881 | TRANK1 | 3 | 36868308 | 36986548 | 258 | 152202 | 6.00 | 9.59E-10 | 7.07E-10 | 3.55E-01 |
| 64478 | CSMD1 | 8 | 2792875 | 4852328 | 16719 | 152225 | 6.17 | 3.36E-10 | 7.12E-10 | 1.13E-01 |
| 23451 | SF3B1 | 2 | 198256698 | 198299815 | 41 | 152242 | 5.95 | 1.37E-09 | 7.83E-10 | 4.33E-01 |
| 9776 | ATG13 | 11 | 46638826 | 46697569 | 50 | 151955 | 6.21 | 2.70E-10 | 9.00E-10 | 5.79E-02 |
| 3699 | ITIH3 | 3 | 52828784 | 52843025 | 21 | 152198 | 5.93 | 1.52E-09 | 1.06E-09 | 3.76E-01 |
| 22891 | ZNF365 | 10 | 64133916 | 64431771 | 912 | 152230 | 5.80 | 3.39E-09 | 1.15E-09 | 6.07E-01 |
| 10198 | MPHOSPH9 | 12 | 123640943 | 123717785 | 198 | 152198 | 5.65 | 8.02E-09 | 1.16E-09 | 8.40E-01 |
| 7444 | VRK2 | 2 | 58273777 | 58387055 | 165 | 152258 | 5.65 | 7.95E-09 | 1.21E-09 | 8.26E-01 |
| 6314 | ATXN7 | 3 | 63849785 | 63989240 | 225 | 152198 | 5.79 | 3.45E-09 | 1.27E-09 | 5.84E-01 |
| 259215 | LY6G6F | 6 | 31674625 | 31678372 | 15 | 152212 | 6.11 | 5.08E-10 | 1.34E-09 | 8.36E-02 |
| 9892 | SNAP91 | 6 | 84262604 | 84419127 | 297 | 152235 | 5.77 | 4.02E-09 | 1.40E-09 | 6.02E-01 |
| 23293 | SMG6 | 17 | 1963133 | 2207069 | 657 | 152265 | 5.92 | 1.64E-09 | 1.45E-09 | 3.04E-01 |
| 51460 | SFMBT1 | 3 | 52933221 | 53080089 | 321 | 152232 | 6.02 | 8.56E-10 | 1.53E-09 | 1.41E-01 |
| 8334 | HIST1H2AC | 6 | 26124370 | 26139337 | 49 | 152327 | 6.10 | 5.15E-10 | 1.59E-09 | 6.60E-02 |
| 1143 | CHRNB4 | 15 | 78916636 | 78933587 | 33 | 152040 | 6.14 | 4.02E-10 | 1.73E-09 | 3.75E-02 |
| 3833 | KIFC1 | 6 | 33359301 | 33377701 | 47 | 152179 | 5.73 | 5.17E-09 | 1.76E-09 | 6.16E-01 |
| 3700 | ITIH4 | 3 | 52847006 | 52864717 | 39 | 152227 | 5.86 | 2.35E-09 | 1.93E-09 | 3.30E-01 |

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| 1136 | CHRNA3 | 15 | 78885394 | 78913637 | 92 | 152263 | 6.14 | 4.04E-10 | 1.98E-09 | 3.06E-02 |
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| 79568 | C2orf47 | 2 | 200820040 | 200828848 | 16 | 152247 | 5.71 | 5.65E-09 | 2.34E-09 | 5.53E-01 |
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| 56899 | ANKS1B | 12 | 99128569 | 100378512 | 3175 | 152186 | 5.50 | 1.86E-08 | 3.46E-09 | 8.01E-01 |
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| 55568 | GALNT10 | 5 | 153570295 | 153800544 | 841 | 152260 | 6.01 | 9.01E-10 | 4.05E-09 | 3.47E-02 |
| 2107 | ETF1 | 5 | 137841782 | 137878989 | 66 | 152150 | 5.64 | 8.54E-09 | 4.33E-09 | 4.97E-01 |
| 26058 | GIGYF2 | 2 | 233562015 | 233725287 | 404 | 152174 | 5.75 | 4.41E-09 | 4.91E-09 | 2.50E-01 |
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| 8347 | HIST1H2BC | 6 | 26113389 | 26124266 | 39 | 152273 | 6.03 | 8.24E-10 | 5.04E-09 | 1.95E-02 |
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| 3024 | HIST1H1A | 6 | 26017260 | 26018040 | 4 | 152345 | 5.79 | 3.42E-09 | 5.42E-09 | 1.66E-01 |
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| 203068 | TUBB | 6 | 30688012 | 30693199 | 24 | 152215 | 5.83 | 2.70E-09 | 5.60E-09 | 1.17E-01 |
| 51177 | PLEKHO1 | 1 | 150122170 | 150131825 | 13 | 152116 | 5.51 | 1.80E-08 | 5.99E-09 | 6.46E-01 |
| 80145 | THOC7 | 3 | 63819546 | 63849597 | 37 | 152252 | 5.53 | 1.65E-08 | 6.14E-09 | 6.02E-01 |
| 80739 | C6orf25 | 6 | 31691121 | 31694487 | 4 | 152369 | 6.03 | 8.44E-10 | 6.21E-09 | 1.35E-02 |
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| 9980 | DOPEY2 | 21 | 37529080 | 37666572 | 578 | 152252 | 5.29 | 6.05E-08 | 8.45E-09 | 8.74E-01 |

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| 130132 | RFTN2 | 2 | 198435524 | 198540774 | 162 | 152214 | 5.48 | 2.11E-08 | 8.71E-09 | 5.75E-01 |
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| 54815 | GATAD2A | 19 | 19496642 | 19619741 | 174 | 152235 | 5.51 | 1.76E-08 | 1.16E-08 | 4.17E-01 |
| 54715 | RBFOX1 | 16 | 5289469 | 7763342 | 13709 | 152146 | 5.72 | 5.18E-09 | 1.26E-08 | 9.24E-02 |
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| 83450 | LRRC48 | 17 | 17876127 | 17920203 | 70 | 152268 | 5.41 | 3.23E-08 | 2.21E-08 | 4.09E-01 |
| 1589 | CYP21A2 | 6 | 32006093 | 32009447 | 26 | 152162 | 5.39 | 3.43E-08 | 2.34E-08 | 4.15E-01 |
| 202658 | TRIM39-RPP21 | 6 | 30297088 | 30314635 | 54 | 152337 | 5.55 | 1.41E-08 | 2.36E-08 | 1.57E-01 |
| 79676 | OGFOD2 | 12 | 123459354 | 123464588 | 6 | 152174 | 5.31 | 5.59E-08 | 2.49E-08 | 5.67E-01 |
| 23166 | STAB1 | 3 | 52529354 | 52558512 | 45 | 152248 | 5.21 | 9.69E-08 | 2.53E-08 | 7.41E-01 |
| 283254 | HARBI1 | 11 | 46624856 | 46638933 | 10 | 151946 | 5.68 | 6.83E-09 | 2.58E-08 | 4.30E-02 |
| 8120 | AP3B2 | 15 | 83328033 | 83378660 | 121 | 152333 | 5.28 | 6.42E-08 | 2.80E-08 | 5.70E-01 |
| 667 | DST | 6 | 56322785 | 56819426 | 957 | 152255 | 5.98 | 1.09E-09 | 2.89E-08 | 4.63E-04 |
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| 3313 | HSPA9 | 5 | 137890571 | 137911318 | 40 | 152062 | 5.33 | 5.03E-08 | 3.15E-08 | 4.51E-01 |
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| 64506 | CPEB1 | 15 | 83211948 | 83316762 | 276 | 152292 | 5.24 | 8.05E-08 | 3.23E-08 | 6.03E-01 |
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| 392 | ARHGAP1 | 11 | 46698625 | 46722215 | 27 | 151985 | 5.41 | 3.11E-08 | 3.51E-08 | 2.58E-01 |

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| 1138 | CHRNA5 | 15 | 78857862 | 78887611 | 66 | 152256 | 5.60 | 1.07E-08 | 3.55E-08 | 5.57E-02 |
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| 389125 | MUSTN1 | 3 | 52867131 | 52869235 | 7 | 152201 | 5.17 | 1.18E-07 | 4.58E-08 | 6.24E-01 |
| 11311 | VPS45 | 1 | 150039350 | 150117505 | 90 | 152315 | 5.16 | 1.23E-07 | 5.06E-08 | 6.01E-01 |
| 6733 | SRPK2 | 7 | 104754048 | 105039614 | 519 | 152232 | 5.77 | 4.02E-09 | 5.32E-08 | 2.73E-03 |
| 83943 | IMMP2L | 7 | 110303106 | 111202588 | 1722 | 152222 | 5.36 | 4.21E-08 | 5.35E-08 | 2.24E-01 |
| 3658 | IREB2 | 15 | 78730518 | 78793798 | 135 | 152239 | 5.19 | 1.07E-07 | 5.35E-08 | 5.36E-01 |
| 4916 | NTRK3 | 15 | 88419948 | 88800026 | 819 | 152243 | 5.17 | 1.17E-07 | 5.45E-08 | 5.59E-01 |
| 63826 | SRR | 17 | 2207244 | 2228553 | 35 | 152057 | 5.02 | 2.53E-07 | 5.58E-08 | 8.11E-01 |
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| 83698 | CALN1 | 7 | 71244476 | 71912136 | 1915 | 152211 | 4.90 | 4.85E-07 | 6.01E-08 | 9.22E-01 |
| 1813 | DRD2 | 11 | 113280317 | 113346413 | 176 | 152291 | 5.29 | 6.17E-08 | 6.31E-08 | 2.87E-01 |
| 23659 | PLA2G15 | 16 | 68279240 | 68294965 | 27 | 152342 | 5.29 | 6.15E-08 | 6.47E-08 | 2.77E-01 |
| 79019 | CENPM | 22 | 42334531 | 42343155 | 30 | 152342 | 5.05 | 2.24E-07 | 6.59E-08 | 7.19E-01 |
| 79018 | GID4 | 17 | 17942611 | 17971719 | 46 | 152265 | 5.31 | 5.39E-08 | 6.77E-08 | 2.28E-01 |
| 388336 | SHISA6 | 17 | 11144740 | 11467380 | 1106 | 152208 | 4.97 | 3.32E-07 | 7.35E-08 | 8.09E-01 |
| 55964 | SEPT3 | 22 | 42372855 | 42394225 | 51 | 152218 | 5.00 | 2.93E-07 | 7.65E-08 | 7.63E-01 |
| 94026 | POM121L2 | 6 | 27276842 | 27280011 | 12 | 152138 | 5.60 | 1.07E-08 | 8.58E-08 | 8.45E-03 |
| 10246 | SLC17A2 | 6 | 25912982 | 25930954 | 60 | 152274 | 5.68 | 6.67E-09 | 8.95E-08 | 2.48E-03 |
| 5526 | PPP2R5B | 11 | 64692143 | 64701950 | 22 | 152254 | 5.03 | 2.50E-07 | 1.06E-07 | 6.06E-01 |
| 164684 | WBP2NL | 22 | 42391607 | 42428935 | 84 | 152286 | 4.99 | 3.09E-07 | 1.09E-07 | 6.72E-01 |
| 26354 | GNL3 | 3 | 52719936 | 52728513 | 13 | 152343 | 4.97 | 3.36E-07 | 1.18E-07 | 6.72E-01 |
| 4700 | NDUFA6 | 22 | 42481530 | 42486888 | 11 | 152214 | 4.82 | 7.15E-07 | 1.23E-07 | 8.76E-01 |
| 8448 | DOC2A | 16 | 30016835 | 30023424 | 12 | 152340 | 5.34 | 4.69E-08 | 1.29E-07 | 7.39E-02 |
| 23383 | MAU2 | 19 | 19431496 | 19469563 | 72 | 152200 | 5.02 | 2.65E-07 | 1.35E-07 | 5.44E-01 |
| 1819 | DRG2 | 17 | 17991181 | 18011299 | 35 | 152279 | 5.27 | 6.81E-08 | 1.36E-07 | 1.23E-01 |
| 79913 | ACTR5 | 20 | 37376933 | 37401089 | 106 | 152243 | 5.25 | 7.49E-08 | 1.40E-07 | 1.35E-01 |
| 3831 | KLC1 | 14 | 104095525 | 104167888 | 158 | 152290 | 5.16 | 1.25E-07 | 1.42E-07 | 2.58E-01 |
| 117283 | IP6K3 | 6 | 33689415 | 33714762 | 111 | 152296 | 5.17 | 1.17E-07 | 1.46E-07 | 2.32E-01 |
| 696 | BTN1A1 | 6 | 26500577 | 26510653 | 21 | 152355 | 5.50 | 1.93E-08 | 1.47E-07 | 9.72E-03 |

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| 56147 | PCDHA1 | 5 | 140165876 | 140391929 | 461 | 152187 | 5.09 | 1.78E-07 | 1.51E-07 | 3.55E-01 |
| 8859 | STK19 | 6 | 31938952 | 31949223 | 41 | 152127 | 5.31 | 5.41E-08 | 1.63E-07 | 6.23E-02 |
| 55793 | FAM63A | 1 | 150969213 | 150980854 | 18 | 152228 | 5.38 | 3.71E-08 | 1.65E-07 | 3.01E-02 |
| 283899 | INO80E | 16 | 30007485 | 30017112 | 24 | 152269 | 5.23 | 8.54E-08 | 1.81E-07 | 1.12E-01 |
| 6252 | RTN1 | 14 | 60062694 | 60337557 | 502 | 152242 | 4.79 | 8.38E-07 | 1.90E-07 | 8.18E-01 |
| 399979 | SNX19 | 11 | 130745766 | 130786382 | 231 | 152272 | 4.72 | 1.15E-06 | 1.93E-07 | 8.87E-01 |
| 55193 | PBRM1 | 3 | 52579368 | 52719866 | 328 | 152263 | 4.86 | 5.83E-07 | 1.98E-07 | 6.97E-01 |
| 51567 | TDP2 | 6 | 24650205 | 24667115 | 66 | 152229 | 5.11 | 1.59E-07 | 2.08E-07 | 2.21E-01 |
| 56146 | PCDHA2 | 5 | 140174444 | 140391929 | 444 | 152181 | 5.04 | 2.36E-07 | 2.10E-07 | 3.44E-01 |
| 133482 | SLCO6A1 | 5 | 101707492 | 101834720 | 476 | 152327 | 4.94 | 3.92E-07 | 2.13E-07 | 5.23E-01 |
| 3990 | LIPC | 15 | 58702953 | 58861073 | 507 | 152053 | 5.03 | 2.43E-07 | 2.18E-07 | 3.43E-01 |
| 280636 | C11orf31 | 11 | 57508722 | 57510883 | 3 | 152339 | 5.38 | 3.75E-08 | 2.22E-07 | 1.64E-02 |
| 53335 | BCL11A | 2 | 60678302 | 60780633 | 163 | 152173 | 5.00 | 2.87E-07 | 2.23E-07 | 3.93E-01 |
| 387893 | SETD8 | 12 | 123868704 | 123893900 | 60 | 152217 | 4.91 | 4.58E-07 | 2.24E-07 | 5.68E-01 |
| 4248 | MGAT3 | 22 | 39843235 | 39888199 | 74 | 152113 | 4.96 | 3.61E-07 | 2.25E-07 | 4.78E-01 |
| 221504 | ZBTB9 | 6 | 33422356 | 33425321 | 4 | 152027 | 5.02 | 2.59E-07 | 2.31E-07 | 3.45E-01 |
| 10274 | STAG1 | 3 | 136055077 | 136471245 | 634 | 152259 | 4.83 | 6.95E-07 | 2.35E-07 | 7.02E-01 |
| 5252 | PHF1 | 6 | 33378773 | 33384230 | 11 | 152225 | 4.85 | 6.15E-07 | 2.36E-07 | 6.58E-01 |
| 6787 | NEK4 | 3 | 52744796 | 52804965 | 134 | 152256 | 4.85 | 6.12E-07 | 2.38E-07 | 6.52E-01 |
| 1388 | ATF6B | 6 | 32083045 | 32096017 | 25 | 152080 | 5.09 | 1.82E-07 | 2.40E-07 | 2.20E-01 |
| 253982 | ASPHD1 | 16 | 29912147 | 29931181 | 25 | 151977 | 5.01 | 2.77E-07 | 2.49E-07 | 3.45E-01 |
| 22986 | SORCS3 | 10 | 106400859 | 107024993 | 1856 | 152293 | 4.96 | 3.51E-07 | 2.53E-07 | 4.19E-01 |
| 25921 | ZDHHC5 | 11 | 57435223 | 57468659 | 51 | 152161 | 5.49 | 2.04E-08 | 2.60E-07 | 2.24E-03 |
| 56145 | PCDHA3 | 5 | 140180783 | 140391929 | 433 | 152184 | 5.00 | 2.86E-07 | 2.62E-07 | 3.35E-01 |
| 6941 | TCF19 | 6 | 31126303 | 31134183 | 56 | 152368 | 4.97 | 3.29E-07 | 2.65E-07 | 3.77E-01 |
| 29113 | C6orf15 | 6 | 31079000 | 31080332 | 17 | 152367 | 4.84 | 6.47E-07 | 2.75E-07 | 6.18E-01 |
| 3697 | ITIH1 | 3 | 52811602 | 52826084 | 36 | 152196 | 4.91 | 4.49E-07 | 2.76E-07 | 4.83E-01 |
| 2260 | FGFR1 | 8 | 38268656 | 38326352 | 84 | 152085 | 4.98 | 3.26E-07 | 3.00E-07 | 3.36E-01 |
| 50651 | SLC45A1 | 1 | 8378171 | 8404227 | 86 | 152175 | 4.71 | 1.21E-06 | 3.02E-07 | 8.05E-01 |
| 3135 | HLA-G | 6 | 29794756 | 29798899 | 74 | 152350 | 4.67 | 1.49E-06 | 3.05E-07 | 8.49E-01 |
| 57794 | SUGP1 | 19 | 19387320 | 19431321 | 85 | 152312 | 4.89 | 5.04E-07 | 3.10E-07 | 4.81E-01 |
| 79161 | C7orf23 | 7 | 86825477 | 86849889 | 73 | 152273 | 4.92 | 4.43E-07 | 3.12E-07 | 4.31E-01 |
| 9988 | DMTF1 | 7 | 86781677 | 86825648 | 140 | 152312 | 4.87 | 5.50E-07 | 3.32E-07 | 4.89E-01 |

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| 146691 | TOM1L2 | 17 | 17746822 | 17875784 | 169 | 152296 | 4.79 | 8.28E-07 | 3.41E-07 | 6.37E-01 |
| 23478 | SEC11A | 15 | 85212768 | 85259691 | 102 | 152192 | 5.04 | 2.36E-07 | 3.42E-07 | 1.94E-01 |
| 80219 | COQ10B | 2 | 198318231 | 198339851 | 21 | 152100 | 4.89 | 4.95E-07 | 3.44E-07 | 4.42E-01 |
| 131118 | DNAJC19 | 3 | 180701497 | 180707562 | 4 | 152111 | 4.93 | 4.21E-07 | 3.48E-07 | 3.76E-01 |
| 346157 | ZNF391 | 6 | 27356524 | 27371683 | 90 | 152346 | 5.05 | 2.16E-07 | 3.53E-07 | 1.65E-01 |
| 10385 | BTN2A2 | 6 | 26383111 | 26395102 | 48 | 152324 | 5.11 | 1.65E-07 | 3.58E-07 | 1.08E-01 |
| 389421 | LIN28B | 6 | 105384874 | 105531207 | 199 | 152131 | 4.93 | 4.08E-07 | 3.79E-07 | 3.33E-01 |
| 64943 | NT5DC2 | 3 | 52558385 | 52569093 | 26 | 152244 | 4.74 | 1.06E-06 | 3.84E-07 | 6.89E-01 |
| 56144 | PCDHA4 | 5 | 140186672 | 140391929 | 412 | 152181 | 4.92 | 4.30E-07 | 4.17E-07 | 3.18E-01 |
| 170679 | PSORS1C1 | 6 | 31082608 | 31107869 | 321 | 152331 | 4.81 | 7.59E-07 | 4.32E-07 | 5.16E-01 |
| 9889 | ZBED4 | 22 | 50247497 | 50283726 | 132 | 152169 | 4.62 | 1.92E-06 | 4.35E-07 | 8.38E-01 |
| 1803 | DPP4 | 2 | 162848751 | 162931052 | 136 | 152015 | 4.95 | 3.63E-07 | 4.39E-07 | 2.48E-01 |
| 27303 | RBMS3 | 3 | 29322351 | 30051886 | 2974 | 152268 | 4.78 | 8.63E-07 | 4.47E-07 | 5.55E-01 |
| 3304 | HSPA1B | 6 | 31789964 | 31798032 | 17 | 152039 | 4.95 | 3.73E-07 | 4.53E-07 | 2.46E-01 |
| 24149 | ZNF318 | 6 | 43303808 | 43337181 | 48 | 152236 | 5.11 | 1.62E-07 | 4.67E-07 | 6.54E-02 |
| 196383 | RILPL2 | 12 | 123899936 | 123921264 | 51 | 151658 | 4.73 | 1.14E-06 | 4.75E-07 | 6.66E-01 |
| 6720 | SREBF1 | 17 | 17714663 | 17740331 | 39 | 152210 | 4.71 | 1.25E-06 | 4.97E-07 | 6.62E-01 |
| 137492 | VPS37A | 8 | 17104401 | 17155533 | 175 | 152292 | 4.97 | 3.38E-07 | 5.09E-07 | 1.85E-01 |
| 64080 | RBKS | 2 | 28004266 | 28113223 | 179 | 152248 | 4.56 | 2.55E-06 | 5.31E-07 | 8.59E-01 |
| 170680 | PSORS1C2 | 6 | 31105311 | 31107127 | 21 | 152354 | 4.59 | 2.20E-06 | 5.46E-07 | 8.12E-01 |
| 57188 | ADAMTSL3 | 15 | 84322838 | 84708594 | 1051 | 152277 | 4.98 | 3.20E-07 | 5.64E-07 | 1.48E-01 |
| 79684 | MSANTD2 | 11 | 124636388 | 124670868 | 59 | 151888 | 4.81 | 7.50E-07 | 5.70E-07 | 4.18E-01 |
| 473 | RERE | 1 | 8412464 | 8877699 | 702 | 152234 | 4.86 | 5.83E-07 | 5.82E-07 | 3.10E-01 |
| 3336 | HSPE1 | 2 | 198364721 | 198368187 | 2 | 152372 | 4.72 | 1.20E-06 | 5.96E-07 | 5.72E-01 |
| 5330 | PLCB2 | 15 | 40576461 | 40600174 | 44 | 152055 | 4.88 | 5.43E-07 | 6.24E-07 | 2.66E-01 |
| 7840 | ALMS1 | 2 | 73612886 | 73837047 | 384 | 152208 | 4.60 | 2.11E-06 | 6.32E-07 | 7.64E-01 |
| 26707 | OR2J2 | 6 | 29141311 | 29142351 | 7 | 152372 | 4.79 | 8.50E-07 | 6.62E-07 | 3.99E-01 |
| 374887 | YJEFN3 | 19 | 19639670 | 19648393 | 14 | 152355 | 4.68 | 1.46E-06 | 6.88E-07 | 5.96E-01 |
| 9093 | DNAJA3 | 16 | 4475806 | 4506776 | 60 | 152150 | 4.57 | 2.48E-06 | 6.90E-07 | 7.91E-01 |
| 9861 | PSMD6 | 3 | 63996225 | 64009686 | 37 | 152243 | 4.64 | 1.73E-06 | 7.04E-07 | 6.59E-01 |
| 7068 | THRB | 3 | 24158644 | 24536772 | 1126 | 152240 | 4.93 | 4.12E-07 | 7.07E-07 | 1.54E-01 |
| 7932 | OR2H2 | 6 | 29553818 | 29556745 | 7 | 152302 | 4.98 | 3.12E-07 | 7.12E-07 | 9.80E-02 |
| 23457 | ABCB9 | 12 | 123405498 | 123451056 | 33 | 152042 | 4.67 | 1.48E-06 | 7.99E-07 | 5.56E-01 |

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|-----------|-----------|----|-----------|-----------|------|--------|------|----------|----------|----------|
| 3105 | HLA-A | 6 | 29910247 | 29913661 | 186 | 152198 | 4.93 | 4.07E-07 | 8.12E-07 | 1.22E-01 |
| 56135 | PCDHAC1 | 5 | 140306302 | 140391929 | 209 | 152199 | 4.91 | 4.65E-07 | 8.15E-07 | 1.49E-01 |
| 6499 | SKIV2L | 6 | 31926581 | 31937532 | 38 | 152074 | 5.03 | 2.51E-07 | 8.36E-07 | 4.79E-02 |
| 57176 | VAR52 | 6 | 30881982 | 30894236 | 64 | 152360 | 4.60 | 2.08E-06 | 8.94E-07 | 6.38E-01 |
| 53345 | TM6SF2 | 19 | 19374841 | 19384074 | 24 | 152222 | 4.72 | 1.18E-06 | 9.25E-07 | 4.03E-01 |
| 56136 | PCDHA13 | 5 | 140261854 | 140391929 | 287 | 152213 | 4.82 | 7.01E-07 | 9.76E-07 | 2.08E-01 |
| 348980 | HCN1 | 5 | 45255052 | 45696220 | 404 | 152188 | 4.70 | 1.31E-06 | 1.01E-06 | 4.10E-01 |
| 56143 | PCDHA5 | 5 | 140201361 | 140391929 | 384 | 152186 | 4.76 | 9.46E-07 | 1.02E-06 | 2.88E-01 |
| 51075 | TMX2 | 11 | 57479995 | 57508445 | 46 | 152259 | 5.11 | 1.58E-07 | 1.03E-06 | 1.10E-02 |
| 28972 | SPCS1 | 3 | 52739792 | 52742198 | 4 | 152322 | 4.57 | 2.41E-06 | 1.03E-06 | 6.43E-01 |
| 5243 | ABCB1 | 7 | 87133179 | 87342639 | 419 | 152293 | 4.79 | 8.28E-07 | 1.05E-06 | 2.35E-01 |
| 56137 | PCDHA12 | 5 | 140254931 | 140391929 | 295 | 152216 | 4.81 | 7.74E-07 | 1.06E-06 | 2.13E-01 |
| 28992 | MACROD1 | 11 | 63766006 | 63933602 | 380 | 152205 | 4.69 | 1.37E-06 | 1.08E-06 | 4.05E-01 |
| 10279 | PRSS16 | 6 | 27215480 | 27224399 | 20 | 152273 | 4.87 | 5.72E-07 | 1.09E-06 | 1.32E-01 |
| 4665 | NAB2 | 12 | 57482677 | 57489259 | 11 | 152158 | 4.55 | 2.69E-06 | 1.13E-06 | 6.57E-01 |
| 56141 | PCDHA7 | 5 | 140213969 | 140391929 | 368 | 152179 | 4.75 | 1.00E-06 | 1.14E-06 | 2.70E-01 |
| 2309 | FOXO3 | 6 | 108881026 | 109005972 | 165 | 152252 | 4.57 | 2.42E-06 | 1.17E-06 | 6.02E-01 |
| 115708 | TRMT61A | 14 | 103995509 | 104003410 | 19 | 152291 | 4.70 | 1.29E-06 | 1.21E-06 | 3.39E-01 |
| 137994 | LETM2 | 8 | 38240041 | 38267045 | 37 | 152185 | 4.78 | 8.66E-07 | 1.21E-06 | 2.07E-01 |
| 100507679 | MUC22 | 6 | 30973729 | 31003179 | 475 | 152233 | 4.96 | 3.56E-07 | 1.22E-06 | 4.50E-02 |
| 2272 | FHIT | 3 | 59735036 | 61237133 | 6531 | 152250 | 4.94 | 3.83E-07 | 1.26E-06 | 4.90E-02 |
| 158293 | FAM120AOS | 9 | 96208776 | 96215874 | 23 | 152255 | 4.66 | 1.56E-06 | 1.27E-06 | 3.93E-01 |
| 6046 | BRD2 | 6 | 32936437 | 32949282 | 102 | 152351 | 4.58 | 2.32E-06 | 1.32E-06 | 5.35E-01 |
| 283129 | C11orf85 | 11 | 64705702 | 64739565 | 93 | 152323 | 4.71 | 1.22E-06 | 1.33E-06 | 2.85E-01 |
| 9745 | ZNF536 | 19 | 30863328 | 31048966 | 434 | 152100 | 4.72 | 1.20E-06 | 1.36E-06 | 2.74E-01 |
| 3118 | HLA-DQA2 | 6 | 32709156 | 32714664 | 77 | 152306 | 5.16 | 1.23E-07 | 1.37E-06 | 2.54E-03 |
| 56142 | PCDHA6 | 5 | 140207650 | 140391929 | 379 | 152184 | 4.70 | 1.30E-06 | 1.43E-06 | 2.83E-01 |
| 7738 | ZNF184 | 6 | 27418521 | 27440897 | 89 | 152326 | 4.81 | 7.54E-07 | 1.44E-06 | 1.31E-01 |
| 1500 | CTNND1 | 11 | 57520756 | 57586652 | 84 | 152175 | 5.23 | 8.37E-08 | 1.53E-06 | 5.16E-04 |
| 4325 | MMP16 | 8 | 89049460 | 89339717 | 678 | 152208 | 5.00 | 2.94E-07 | 1.54E-06 | 1.74E-02 |
| 56140 | PCDHA8 | 5 | 140220907 | 140391929 | 358 | 152176 | 4.70 | 1.33E-06 | 1.58E-06 | 2.58E-01 |
| 166336 | PRICKLE2 | 3 | 64079526 | 64253859 | 562 | 152246 | 4.57 | 2.44E-06 | 1.58E-06 | 4.87E-01 |
| 58506 | SCAF1 | 19 | 50145382 | 50161906 | 18 | 151947 | 4.67 | 1.48E-06 | 1.59E-06 | 2.96E-01 |

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|--------------|----------------|-----------|-----------------|-----------------|-------------|---------------|-------------|-----------------|-----------------|-----------------|
| 5094 | PCBP2 | 12 | 53845886 | 53874946 | 28 | 152197 | 4.66 | 1.61E-06 | 1.63E-06 | 3.14E-01 |
| 2066 | ERBB4 | 2 | 212240442 | 213403879 | 4442 | 152215 | 4.71 | 1.24E-06 | 1.67E-06 | 2.18E-01 |
| 144348 | ZNF664 | 12 | 124457699 | 124499986 | 79 | 152238 | 4.81 | 7.47E-07 | 1.71E-06 | 9.62E-02 |
| 54904 | WHSC1L1 | 8 | 38127217 | 38239872 | 124 | 152193 | 4.77 | 9.14E-07 | 1.73E-06 | 1.32E-01 |
| 6892 | TAPBP | 6 | 33267471 | 33282164 | 38 | 152184 | 4.75 | 1.03E-06 | 1.77E-06 | 1.53E-01 |
| 80309 | SPHKAP | 2 | 228844670 | 229046836 | 722 | 152265 | 4.73 | 1.13E-06 | 1.80E-06 | 1.73E-01 |
| 2590 | GALNT2 | 1 | 230202956 | 230417875 | 797 | 152134 | 4.82 | 7.25E-07 | 1.86E-06 | 7.71E-02 |
| 51107 | APH1A | 1 | 150237799 | 150241609 | 2 | 152317 | 4.88 | 5.23E-07 | 1.94E-06 | 3.77E-02 |
| 23248 | RPRD2 | 1 | 150336624 | 150449042 | 359 | 152289 | 4.65 | 1.69E-06 | 1.96E-06 | 2.65E-01 |
| 56138 | PCDHA11 | 5 | 140247149 | 140391932 | 306 | 152221 | 4.67 | 1.48E-06 | 2.04E-06 | 2.13E-01 |
| 1800 | DPEP1 | 16 | 89679716 | 89707216 | 91 | 151997 | 4.77 | 9.15E-07 | 2.07E-06 | 9.65E-02 |
| 9779 | TBC1D5 | 3 | 17198654 | 17784240 | 1332 | 152288 | 4.90 | 4.80E-07 | 2.09E-06 | 2.65E-02 |
| 9509 | ADAMTS2 | 5 | 178537852 | 178772431 | 892 | 152056 | 4.81 | 7.40E-07 | 2.11E-06 | 6.26E-02 |
| 346007 | EYS | 6 | 64429876 | 66417118 | 6079 | 152260 | 5.06 | 2.05E-07 | 2.18E-06 | 2.61E-03 |
| 5639 | PRRG2 | 19 | 50084574 | 50094272 | 30 | 152248 | 4.68 | 1.42E-06 | 2.21E-06 | 1.78E-01 |
| 23113 | CUL9 | 6 | 43149913 | 43192325 | 85 | 152219 | 4.57 | 2.42E-06 | 2.36E-06 | 3.29E-01 |
| 54970 | TTC12 | 11 | 113185251 | 113244345 | 121 | 152272 | 4.67 | 1.51E-06 | 2.57E-06 | 1.56E-01 |
| 29982 | NRBF2 | 10 | 64893007 | 64914786 | 44 | 152205 | 4.70 | 1.30E-06 | 2.61E-06 | 1.19E-01 |
| 51168 | MYO15A | 17 | 18012020 | 18083116 | 133 | 152236 | 4.72 | 1.15E-06 | 2.66E-06 | 9.38E-02 |
| 154215 | NKAIN2 | 6 | 124124991 | 125146786 | 2818 | 152190 | 4.57 | 2.46E-06 | 2.70E-06 | 2.89E-01 |
| 5142 | PDE4B | 1 | 66258193 | 66840262 | 1485 | 152185 | 4.75 | 1.00E-06 | 2.76E-06 | 6.70E-02 |
| 5929 | RBBP5 | 1 | 205055270 | 205091150 | 107 | 152263 | 4.58 | 2.32E-06 | 2.82E-06 | 2.53E-01 |
| 84513 | PPAPDC1B | 8 | 38119035 | 38126841 | 8 | 152264 | 4.68 | 1.41E-06 | 2.90E-06 | 1.14E-01 |
| 259197 | NCR3 | 6 | 31556660 | 31560762 | 24 | 152208 | 4.62 | 1.90E-06 | 2.91E-06 | 1.83E-01 |
| 6911 | TBX6 | 16 | 30097114 | 30103258 | 9 | 151883 | 4.62 | 1.90E-06 | 3.27E-06 | 1.53E-01 |
| 1385 | CREB1 | 2 | 208394616 | 208470284 | 113 | 152209 | 4.71 | 1.27E-06 | 3.28E-06 | 7.51E-02 |
| 29123 | ANKRD11 | 16 | 89334029 | 89556969 | 446 | 152096 | 4.77 | 9.02E-07 | 3.32E-06 | 3.60E-02 |
| 55604 | LRRC16A | 6 | 25279656 | 25620758 | 1503 | 152313 | 4.78 | 8.95E-07 | 3.42E-06 | 3.40E-02 |
| 83596 | BCL2L12 | 19 | 50168399 | 50177173 | 9 | 152072 | 4.56 | 2.52E-06 | 3.50E-06 | 2.12E-01 |
| 9277 | WDR46 | 6 | 33246682 | 33257304 | 34 | 152271 | 4.75 | 1.01E-06 | 3.79E-06 | 3.50E-02 |
| 83723 | FAM57B | 16 | 30035748 | 30064338 | 50 | 152188 | 4.65 | 1.67E-06 | 3.92E-06 | 8.93E-02 |
| 64786 | TBC1D15 | 12 | 72233487 | 72320629 | 183 | 152276 | 4.58 | 2.29E-06 | 4.19E-06 | 1.38E-01 |
| 162494 | RHBDL3 | 17 | 30593195 | 30651680 | 191 | 152061 | 4.75 | 1.02E-06 | 4.57E-06 | 2.17E-02 |

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|-------------|-----------------|----------|-----------------|-----------------|-----------|---------------|-------------|-----------------|-----------------|-----------------|
| 84138 | SLC7A6OS | 16 | 68318043 | 68344868 | 42 | 152256 | 4.76 | 9.57E-07 | 4.92E-06 | 1.62E-02 |
| 1687 | DFNA5 | 7 | 24737974 | 24797639 | 244 | 152294 | 4.55 | 2.64E-06 | 6.50E-06 | 8.10E-02 |
| 9057 | SLC7A6 | 16 | 68298419 | 68335726 | 59 | 152231 | 4.68 | 1.46E-06 | 6.52E-06 | 2.22E-02 |
| 2903 | GRIN2A | 16 | 9847265 | 10276611 | 1812 | 152285 | 4.73 | 1.13E-06 | 6.90E-06 | 1.00E-02 |
| 1182 | | 4 | 170541672 | 170644338 | 230 | 152267 | 4.55 | 2.75E-06 | 7.55E-06 | 6.47E-02 |
| 2011 | MARK2 | 11 | 63606400 | 63678492 | 117 | 152126 | 4.57 | 2.48E-06 | 7.97E-06 | 4.54E-02 |
| 226 | ALDOA | 16 | 30064411 | 30081741 | 12 | 152159 | 4.62 | 1.95E-06 | 8.88E-06 | 1.99E-02 |
| 9856 | KIAA0319 | 6 | 24544332 | 24646383 | 396 | 152254 | 4.57 | 2.39E-06 | 1.01E-05 | 2.43E-02 |
| 389084 | C2orf82 | 2 | 233733724 | 233741111 | 23 | 152338 | 4.61 | 2.04E-06 | 1.06E-05 | 1.44E-02 |
| 79153 | GDPD3 | 16 | 30115977 | 30125264 | 17 | 151947 | 4.56 | 2.50E-06 | 1.26E-05 | 1.40E-02 |
| 3120 | HLA-DQB2 | 6 | 32723837 | 32731330 | 62 | 152224 | 4.68 | 1.45E-06 | 1.57E-05 | 1.51E-03 |

*Gene coordinates based on GRCh37/hg19. NSNPs: Number of SNPs per region included in the gene-based analysis. N: Number of individuals considered in the analysis. ZSTAT: the Z-value for the gene. Combined P: p-value obtained in the gene-based meta-analysis of cocaine dependence and SCZ. P SCZ/COCA: p-value of the gene-based in SCZ/COCA sample alone. In bold, new associated genes.