

List of genes associated with hypermethylated CpG sites in 6 CCA compared to 6 matched adjacent normal samples

| probe ID | gene symbol | chromosome | CpG position | strand | CGI | tss | $\Delta\beta$ | P value | adjusted P value |
|------------|-------------|------------|--------------|--------|-----|-----------------------|---------------|----------|------------------|
| cg09229912 | CUTL2 | 12 | 109956346 | + | Yes | 109956211 | 0.6453 | 9.27E-23 | 7.50E-20 |
| cg22946150 | SH3GL3 | 15 | 81907111 | + | Yes | 81907094 | 0.6207 | 3.26E-21 | 1.32E-18 |
| cg22036988 | SPSB4 | 3 | 142253035 | + | Yes | 142253432 | 0.5995 | 2.67E-20 | 7.19E-18 |
| cg17525406 | AJAP1 | 1 | 4615380 | + | Yes | 4614964 | 0.5947 | 1.20E-19 | 1.94E-17 |
| cg10293925 | AMPH | 7 | 38637510 | - | Yes | 38637545 | 0.5909 | 9.98E-20 | 1.94E-17 |
| cg14785479 | SCARF2 | 22 | 19122535 | - | Yes | 19122146 | 0.5836 | 3.94E-19 | 5.31E-17 |
| cg26309134 | ZNF542 | 19 | 61571383 | + | Yes | 61571476 61571279 | 0.5826 | 5.20E-19 | 6.01E-17 |
| cg18338311 | LOC124842 | 17 | 29932052 | + | Yes | 29931880 29930501 | 0.5767 | 8.26E-19 | 7.20E-17 |
| cg26521404 | HOXA9 | 7 | 27171506 | - | Yes | 27171674 | 0.5764 | 5.98E-19 | 6.04E-17 |
| cg16787600 | SORCS3 | 10 | 106390870 | + | Yes | 106390848 | 0.5740 | 9.74E-19 | 7.20E-17 |
| cg06722633 | GRIK3 | 1 | 37271896 | - | Yes | 37272431 | 0.5730 | 9.78E-19 | 7.20E-17 |
| cg14991487 | HOXD9 | 2 | 176695650 | + | Yes | 176695658 | 0.5636 | 3.23E-18 | 2.18E-16 |
| cg18952647 | BNC1 | 15 | 81744748 | - | Yes | 81744472 | 0.5620 | 4.68E-18 | 2.91E-16 |
| cg07080358 | C2orf32 | 2 | 68400011 | - | Yes | 68400687 | 0.5553 | 8.27E-18 | 4.78E-16 |
| cg11657808 | RYR2 | 1 | 235272573 | + | Yes | 235272324 | 0.5489 | 1.67E-17 | 9.03E-16 |
| cg23349790 | IGSF21 | 1 | 18307163 | + | Yes | 18306826 | 0.5477 | 3.05E-17 | 1.30E-15 |
| cg08089301 | HOXB4 | 17 | 44010560 | - | Yes | 44010742 44012308 | 0.5458 | 2.76E-17 | 1.30E-15 |
| cg13398291 | SFRP1 | 8 | 41285326 | - | Yes | 41286147 | 0.5442 | 2.70E-17 | 1.30E-15 |
| cg07533148 | TRIM58 | 1 | 246087435 | + | Yes | 246087123 | 0.5438 | 3.00E-17 | 1.30E-15 |
| cg01683883 | CMTM2 | 16 | 65170554 | + | Yes | 65170851 | 0.5398 | 3.95E-17 | 1.60E-15 |
| cg22619018 | CSMD1 | 8 | 4840032 | - | Yes | 4839736 | 0.5357 | 1.65E-16 | 5.35E-15 |
| cg13912117 | ADCY8 | 8 | 132123737 | - | Yes | 132122017 | 0.5349 | 1.06E-16 | 3.79E-15 |
| cg11438428 | PTF1A | 10 | 23521600 | + | Yes | 23521465 | 0.5346 | 8.56E-17 | 3.30E-15 |
| cg01009664 | TRH | 3 | 131176303 | + | Yes | 131175803 | 0.5342 | 1.08E-16 | 3.79E-15 |
| cg15520279 | HOXD8 | 2 | 176703334 | + | Yes | 176702722 | 0.5326 | 1.21E-16 | 4.07E-15 |
| cg00363813 | HOM-TES-103 | 12 | 6535133 | - | Yes | 6535490 | 0.5207 | 4.15E-16 | 1.29E-14 |
| cg24446548 | TWIST1 | 7 | 19123788 | - | Yes | 19123820 | 0.5182 | 9.29E-16 | 2.59E-14 |
| cg09053680 | UTF1 | 10 | 134894104 | + | Yes | 134893767 | 0.5169 | 5.69E-16 | 1.71E-14 |
| cg09551147 | SORCS3 | 10 | 106389947 | + | Yes | 106390848 | 0.5160 | 6.71E-16 | 1.94E-14 |
| cg10303487 | DPY5 | 8 | 105548234 | - | Yes | 105548453 | 0.5094 | 2.28E-15 | 5.94E-14 |
| cg06760035 | HOXB4 | 17 | 44010244 | - | Yes | 44010742 | 0.5083 | 1.90E-15 | 5.12E-14 |
| cg10362591 | SLC6A2 | 16 | 54247366 | + | Yes | 54248056 | 0.5046 | 4.07E-15 | 9.98E-14 |
| cg14458834 | HOXB4 | 17 | 44010393 | - | Yes | 44010742 44012308 | 0.5044 | 5.21E-15 | 1.24E-13 |
| cg24687051 | KCNQ5 | 6 | 73388794 | + | Yes | 73388291 | 0.5041 | 9.18E-15 | 2.12E-13 |
| cg01610488 | TRPA1 | 8 | 73150424 | - | Yes | 73150373 | 0.5038 | 2.49E-15 | 6.30E-14 |
| cg08097882 | POU4F1 | 13 | 78075517 | - | Yes | 78075696 | 0.4907 | 2.20E-14 | 4.56E-13 |
| cg04330449 | NEUROG1 | 5 | 134899065 | - | Yes | 134899538 | 0.4902 | 1.22E-14 | 2.74E-13 |
| cg03238797 | ADAMTS18 | 16 | 76026394 | - | Yes | 76026512 | 0.4870 | 1.89E-14 | 4.13E-13 |
| cg11389172 | SLC18A3 | 10 | 50488305 | + | Yes | 50487146 50488352 | 0.4855 | 2.12E-14 | 4.51E-13 |
| cg25990647 | OPRK1 | 8 | 54326634 | - | Yes | 54326747 | 0.4851 | 3.64E-14 | 7.17E-13 |
| cg11323198 | CDH8 | 16 | 60627307 | - | Yes | 60627537 | 0.4843 | 2.73E-14 | 5.52E-13 |
| cg00243313 | IRX4 | 5 | 1936413 | - | Yes | 1935880 | 0.4793 | 7.94E-14 | 1.46E-12 |
| cg18888520 | ZNF447 | 19 | 63301618 | - | Yes | 63301542 | 0.4754 | 8.34E-14 | 1.47E-12 |
| cg04434339 | ST6GAL2 | 2 | 106869979 | - | Yes | 106869042 106869995 | 0.4753 | 7.76E-14 | 1.46E-12 |
| cg25720804 | TLX3 | 5 | 170668994 | + | Yes | 170668892 | 0.4744 | 6.84E-14 | 1.32E-12 |
| cg00489401 | FLT4 | 5 | 180008481 | - | Yes | 180009230 | 0.4738 | 8.14E-14 | 1.46E-12 |
| cg16792800 | GPC6 | 13 | 92677362 | + | Yes | 92677078 | 0.4734 | 9.27E-14 | 1.60E-12 |
| cg08572611 | ACTL6B | 7 | 100091850 | - | Yes | 100092020 | 0.4729 | 1.34E-13 | 2.12E-12 |
| cg01049530 | BMP3 | 4 | 82171032 | + | Yes | 82171142 | 0.4723 | 1.32E-13 | 2.12E-12 |
| cg20959866 | AJAP1 | 1 | 4613868 | + | Yes | 4614964 | 0.4716 | 1.90E-13 | 2.84E-12 |
| cg25875213 | FLJ37549 | 19 | 42874895 | - | Yes | 42875056 | 0.4711 | 1.01E-13 | 1.70E-12 |
| cg01366419 | WBSCR17 | 7 | 70235027 | + | Yes | 70235724 | 0.4698 | 1.11E-13 | 1.83E-12 |
| cg21475402 | BCAN | 1 | 154878764 | + | Yes | 154878363 | 0.4681 | 1.89E-13 | 2.84E-12 |
| cg10332700 | ZNF415 | 19 | 58327889 | - | Yes | 58327957 58327985 | 0.4676 | 2.27E-13 | 3.34E-12 |
| cg04490714 | SLC6A2 | 16 | 54248065 | + | Yes | 54248056 | 0.4670 | 1.42E-13 | 2.21E-12 |
| cg20881910 | HNT | 11 | 131285542 | + | Yes | 131285921 | 0.4639 | 2.86E-13 | 4.06E-12 |
| cg17371081 | NELL1 | 11 | 20647533 | + | Yes | 20647692 | 0.4638 | 3.10E-13 | 4.17E-12 |
| cg21688264 | SNAP91 | 6 | 84475443 | - | Yes | 84475846 | 0.4635 | 2.43E-13 | 3.51E-12 |
| cg00806490 | CDH13 | 16 | 81218374 | + | Yes | 81218078 | 0.4624 | 3.03E-13 | 4.17E-12 |
| cg14409941 | ADAMTS2 | 5 | 178704387 | - | Yes | 178704935 | 0.4624 | 3.09E-13 | 4.17E-12 |
| cg17872757 | FLI1 | 11 | 128069390 | + | Yes | 128069022 | 0.4619 | 8.08E-13 | 9.76E-12 |
| cg26162582 | KCNA6 | 12 | 4788652 | + | Yes | 4788602 | 0.4595 | 4.32E-13 | 5.64E-12 |
| cg01805540 | CACNB2 | 10 | 18469755 | + | Yes | 18469611 18469815 | 0.4586 | 6.29E-13 | 7.95E-12 |
| cg27403635 | KCNN2 | 5 | 113726190 | + | Yes | 113725914 | 0.4580 | 4.31E-13 | 5.64E-12 |
| cg12374721 | PRAC | 17 | 44154639 | + | No | 44155540 44154881 | 0.4576 | 6.20E-13 | 7.95E-12 |
| cg18239753 | KHDRBS2 | 6 | 63053922 | - | Yes | 63054059 | 0.4541 | 7.84E-13 | 9.63E-12 |
| cg18074297 | CLIC6 | 21 | 34963482 | + | Yes | 34963557 | 0.4530 | 8.69E-13 | 1.03E-11 |
| cg21790626 | ZNF154 | 19 | 62912306 | - | Yes | 62912391 | 0.4524 | 1.15E-12 | 1.35E-11 |
| cg20498685 | TWIST1 | 7 | 19122611 | - | Yes | 19123820 | 0.4522 | 7.85E-13 | 9.63E-12 |
| cg27652350 | ALDH1A3 | 15 | 99238512 | + | Yes | 99237531 | 0.4514 | 1.36E-12 | 1.55E-11 |
| cg03755123 | UTF1 | 10 | 134893498 | + | Yes | 134893767 | 0.4476 | 1.40E-12 | 1.58E-11 |
| cg08832227 | KCNA1 | 12 | 4890954 | + | Yes | 4889333 | 0.4466 | 1.61E-12 | 1.78E-11 |
| cg25691167 | FERD3L | 7 | 19151486 | - | Yes | 19151569 | 0.4462 | 1.34E-12 | 1.55E-11 |
| cg01354473 | HOXA9 | 7 | 27171328 | - | Yes | 27171674 | 0.4461 | 1.97E-12 | 2.12E-11 |
| cg03168582 | DMRT1 | 9 | 831850 | + | Yes | 831689 | 0.4457 | 3.26E-12 | 3.37E-11 |
| cg22471346 | GAS7 | 17 | 10042198 | - | Yes | 10042593 | 0.4451 | 1.87E-12 | 2.04E-11 |
| cg19884262 | FLJ46831 | 10 | 129425958 | + | Yes | 129425527 | 0.4429 | 1.99E-12 | 2.12E-11 |
| cg13488201 | ADAM12 | 10 | 128067313 | - | Yes | 128067117 | 0.4412 | 3.29E-12 | 3.37E-11 |
| cg12880658 | CDO1 | 5 | 115180285 | - | Yes | 115180304 | 0.4411 | 3.17E-12 | 3.33E-11 |
| cg07651242 | ADCY1 | 7 | 45581245 | + | Yes | 45580649 | 0.4400 | 4.81E-12 | 4.68E-11 |
| cg14696396 | TM6SF1 | 15 | 81567450 | + | Yes | 81567327 | 0.4398 | 3.49E-12 | 3.53E-11 |
| cg01381846 | HOXA9 | 7 | 27171310 | - | Yes | 27171674 | 0.4396 | 3.98E-12 | 3.97E-11 |
| cg03963198 | IRX4 | 5 | 1935871 | - | Yes | 1935880 | 0.4383 | 4.87E-12 | 4.69E-11 |
| cg12164282 | PXDN | 2 | 1727119 | - | Yes | 1727298 | 0.4380 | 4.44E-12 | 4.38E-11 |
| cg01295203 | PRDM14 | 8 | 71146753 | - | Yes | 71146116 | 0.4378 | 6.29E-12 | 5.78E-11 |
| cg14419187 | C2orf21 | 2 | 210345339 | + | No | 210344961 | 0.4365 | 6.15E-12 | 5.78E-11 |
| cg14614211 | IRXL1 | 10 | 28074253 | - | Yes | 28074784 | 0.4338 | 6.81E-12 | 6.19E-11 |
| cg21243096 | POU3F1 | 1 | 38284144 | - | Yes | 38285037 | 0.4336 | 5.59E-12 | 5.32E-11 |
| cg11248413 | NEUROG1 | 5 | 134899557 | - | Yes | 134899538 | 0.4332 | 1.44E-11 | 1.17E-10 |
| cg23290344 | NEF3 | 8 | 24827371 | + | Yes | 24827178 24828359 | 0.4326 | 6.28E-12 | 5.78E-11 |
| cg08383315 | RIC3 | 11 | 8147141 | - | Yes | 8147166 | 0.4326 | 9.14E-12 | 7.82E-11 |
| cg14859460 | GRM6 | 5 | 178354850 | - | Yes | 178354730 | 0.4325 | 7.87E-12 | 7.00E-11 |
| cg21546671 | HOXB4 | 17 | 44010386 | - | Yes | 44010742 44012308 | 0.4325 | 8.82E-12 | 7.68E-11 |
| cg25886284 | ZNF545 | 19 | 41601258 | - | Yes | 41601390 | 0.4318 | 6.88E-12 | 6.19E-11 |
| cg20291049 | POU3F3 | 2 | 104838649 | + | Yes | 104838400 | 0.4313 | 8.59E-12 | 7.55E-11 |
| cg14037665 | PXDN | 2 | 1727624 | - | Yes | 1727298 | 0.4310 | 9.24E-12 | 7.82E-11 |
| cg23054883 | FZD10 | 12 | 129213533 | + | Yes | 129212984 | 0.4287 | 9.28E-12 | 7.82E-11 |
| cg14384532 | NTRK3 | 15 | 86601628 | - | Yes | 86600665 | 0.4263 | 1.04E-11 | 8.67E-11 |
| cg18536148 | TBX4 | 17 | 56888626 | + | Yes | 56888588 | 0.4257 | 1.37E-11 | 1.13E-10 |
| cg05345286 | MDF1 | 6 | 41714619 | + | Yes | 41714172 | 0.4239 | 1.93E-11 | 1.55E-10 |
| cg07017374 | FLT3 | 13 | 27572451 | - | Yes | 27572729 | 0.4238 | 3.53E-11 | 2.60E-10 |
| cg07846220 | LAMA1 | 18 | 7107680 | - | Yes | 7107813 | 0.4234 | 2.20E-11 | 1.71E-10 |
| cg25044651 | FLJ90650 | 5 | 115326619 | + | Yes | 115326049 | 0.4234 | 1.64E-11 | 1.32E-10 |
| cg04907257 | ADCY2 | 5 | 7448318 | + | Yes | 7449342 | 0.4226 | 2.02E-11 | 1.60E-10 |
| cg22029275 | FLJ25477 | 13 | 24643784 | - | Yes | 24643857 | 0.4211 | 2.22E-11 | 1.71E-10 |
| cg10722799 | CLIC6 | 21 | 34963569 | + | Yes | 34963557 | 0.4209 | 2.43E-11 | 1.84E-10 |
| cg05436658 | PRKCB1 | 16 | 23755069 | - | Yes | 23754800 | 0.4208 | 2.88E-11 | 2.16E-10 |
| cg23316360 | EDNRB | 13 | 77390917 | - | Yes | 77390967 | 0.4206 | 2.43E-11 | 1.84E-10 |
| cg20792062 | KCNA5 | 12 | 5023549 | + | Yes | 5023345 | 0.4205 | 2.03E-11 | 1.60E-10 |
| cg09516965 | PTGDR | 14 | 51804279 | + | Yes | 51804180 | 0.4183 | 8.22E-11 | 5.83E-10 |
| cg23615676 | KCNN2 | 5 | 113725531 | + | Yes | 113725914 | 0.4162 | 3.59E-11 | 2.61E-10 |
| cg19461621 | COLEC12 | 18 | 490979 | - | No | 490729 | 0 | | |

| | | | | | | | | | |
|------------|-----------|----|-----------|------|-----|-----------------------|--------|----------|----------|
| cg01295203 | PRDM14 | 8 | 71146753 | - | Yes | 71146116 | 0.4378 | 6.29E-12 | 5.78E-11 |
| cg14419187 | C2orf121 | 2 | 210345339 | + | No | 210344961 | 0.4365 | 6.15E-12 | 5.78E-11 |
| cg14614211 | IRXL1 | 10 | 28074253 | - | Yes | 28074784 | 0.4338 | 6.81E-12 | 6.19E-11 |
| cg21243096 | POU3F1 | 1 | 38284144 | - | Yes | 38285037 | 0.4336 | 5.59E-12 | 5.32E-11 |
| cg11248413 | NEUROG1 | 5 | 134899557 | - | Yes | 134899538 | 0.4332 | 1.44E-11 | 1.17E-10 |
| cg23290344 | NEF3 | 8 | 24827371 | ++ | Yes | 24827178 24828359 | 0.4326 | 6.28E-12 | 5.78E-11 |
| cg08383315 | RIC3 | 11 | 8147141 | - | Yes | 8147166 | 0.4326 | 9.14E-12 | 7.82E-11 |
| cg14859460 | GRM6 | 5 | 178354850 | - | Yes | 178354730 | 0.4325 | 7.87E-12 | 7.00E-11 |
| cg21546671 | HOXB4 | 17 | 44010386 | - - | Yes | 44010742 44012308 | 0.4325 | 8.82E-12 | 7.68E-11 |
| cg25886284 | ZNF545 | 19 | 41601258 | - | Yes | 41601390 | 0.4318 | 6.88E-12 | 6.19E-11 |
| cg20291049 | POU3F3 | 2 | 104838649 | + | Yes | 104838400 | 0.4313 | 8.59E-12 | 7.55E-11 |
| cg14037665 | PXDN | 2 | 1727624 | - | Yes | 1727298 | 0.4310 | 9.24E-12 | 7.82E-11 |
| cg23054883 | FZD10 | 12 | 129213533 | + | Yes | 129212984 | 0.4287 | 9.28E-12 | 7.82E-11 |
| cg14384532 | NTRK3 | 15 | 86601628 | - | Yes | 86600665 | 0.4263 | 1.04E-11 | 8.67E-11 |
| cg18536148 | TBX4 | 17 | 56888626 | + | Yes | 56888588 | 0.4257 | 1.37E-11 | 1.13E-10 |
| cg05345286 | MDFI | 6 | 41714619 | + | Yes | 41714172 | 0.4239 | 1.93E-11 | 1.55E-10 |
| cg07017374 | FLT3 | 13 | 27572451 | - | Yes | 27572729 | 0.4238 | 3.53E-11 | 2.60E-10 |
| cg07846220 | LAMA1 | 18 | 7107680 | - | Yes | 7107813 | 0.4234 | 2.20E-11 | 1.71E-10 |
| cg25044651 | FLJ90650 | 5 | 115326619 | + | Yes | 115326049 | 0.4234 | 1.64E-11 | 1.32E-10 |
| cg04907257 | ADCY2 | 5 | 7448318 | + | Yes | 7449342 | 0.4226 | 2.02E-11 | 1.60E-10 |
| cg22029275 | FLJ25477 | 13 | 24643784 | - | Yes | 24643857 | 0.4211 | 2.22E-11 | 1.71E-10 |
| cg10722799 | CLIC6 | 21 | 34963569 | + | Yes | 34963557 | 0.4209 | 2.43E-11 | 1.84E-10 |
| cg05436658 | PRKCB1 | 16 | 23755069 | + | Yes | 23754800 | 0.4208 | 2.88E-11 | 2.16E-10 |
| cg23316360 | EDNRB | 13 | 77390917 | - | Yes | 77390967 | 0.4206 | 2.43E-11 | 1.84E-10 |
| cg20792062 | KCNA5 | 12 | 5023549 | + | Yes | 5023345 | 0.4205 | 2.03E-11 | 1.60E-10 |
| cg09516965 | PTGDR | 14 | 51804279 | + | Yes | 51804180 | 0.4183 | 8.22E-11 | 5.83E-10 |
| cg23615676 | KCNN2 | 5 | 113725531 | + | Yes | 113725914 | 0.4162 | 3.59E-11 | 2.61E-10 |
| cg19461621 | COLEC12 | 18 | 490979 | - | No | 490729 | 0.4161 | 3.30E-11 | 2.45E-10 |
| cg18277754 | ALK | 2 | 29997656 | - | Yes | 29997936 | 0.4154 | 5.57E-11 | 3.99E-10 |
| cg11668923 | ADAM12 | 10 | 128066926 | - | Yes | 128067117 | 0.4136 | 1.04E-10 | 7.22E-10 |
| cg11965370 | HNT | 11 | 131286156 | + | Yes | 131285921 | 0.4136 | 4.37E-11 | 3.16E-10 |
| cg22881914 | NID2 | 14 | 51605897 | - | Yes | 51605696 | 0.4105 | 2.72E-10 | 1.64E-09 |
| cg24715245 | UCLH1 | 4 | 40953551 | + | Yes | 40953654 | 0.4079 | 1.46E-10 | 9.51E-10 |
| cg06243556 | ZNF447 | 19 | 63301285 | - | Yes | 63301542 | 0.4069 | 1.25E-10 | 8.52E-10 |
| cg07442479 | GDNF | 5 | 37875526 | - | Yes | 37875539 | 0.4067 | 1.02E-10 | 7.09E-10 |
| cg25802093 | SPAG6 | 10 | 22674044 | + | Yes | 22674404 | 0.4066 | 9.40E-11 | 6.61E-10 |
| cg17410236 | FLRT2 | 14 | 85066248 | + | Yes | 85066240 | 0.4049 | 1.30E-10 | 8.70E-10 |
| cg17252960 | ID4 | 6 | 19945329 | + | Yes | 19945595 | 0.4045 | 1.24E-10 | 8.51E-10 |
| cg22418909 | SFRP1 | 8 | 41285895 | - | Yes | 41286147 | 0.4042 | 1.35E-10 | 8.95E-10 |
| cg25993718 | CBLN4 | 20 | 54013603 | - | Yes | 54013419 | 0.4022 | 1.48E-10 | 9.55E-10 |
| cg12888113 | MASP2 | 1 | 11029635 | - | No | 11029872 | 0.4019 | 1.27E-10 | 8.56E-10 |
| cg19461644 | COL15A1 | 9 | 100746438 | + | Yes | 100745958 | 0.4019 | 1.89E-10 | 1.18E-09 |
| cg26504021 | IRX2 | 5 | 2805882 | ++ - | Yes | 2805261 2804769 | 0.4017 | 1.49E-10 | 9.59E-10 |
| cg19456540 | SIX6 | 14 | 60046038 | + | Yes | 60045690 | 0.4000 | 1.46E-10 | 9.51E-10 |
| cg05860890 | KCNV1 | 8 | 111056046 | - | Yes | 111056135 | 0.3985 | 1.74E-10 | 1.11E-09 |
| cg07295678 | DPYSL4 | 10 | 133849999 | + | Yes | 133850403 | 0.3982 | 1.83E-10 | 1.16E-09 |
| cg15107670 | WT1 | 11 | 32413335 | ++ - | Yes | 32413860 32413663 | 0.3980 | 3.24E-10 | 1.89E-09 |
| cg24645221 | PENK | 8 | 57521482 | - - | Yes | 57521147 57521836 | 0.3973 | 2.16E-10 | 1.33E-09 |
| cg08668790 | ZNF154 | 19 | 62912474 | - | Yes | 62912391 | 0.3972 | 2.36E-10 | 1.45E-09 |
| cg04897683 | NEUROG1 | 5 | 134899361 | - | Yes | 134899538 | 0.3967 | 2.10E-10 | 1.31E-09 |
| cg17241310 | BARHL2 | 1 | 90955444 | - | Yes | 90955382 | 0.3960 | 3.12E-10 | 1.85E-09 |
| cg19064258 | HS3ST2 | 16 | 22733618 | + | Yes | 22733360 | 0.3951 | 2.47E-10 | 1.50E-09 |
| cg17471928 | STAC2 | 17 | 34635356 | - | Yes | 34635500 | 0.3942 | 2.89E-10 | 1.73E-09 |
| cg18236477 | ATP8A2 | 13 | 24941066 | + | Yes | 24941114 | 0.3940 | 3.22E-10 | 1.89E-09 |
| cg22660578 | LHX1 | 17 | 32368142 | + | Yes | 32368611 | 0.3928 | 3.18E-10 | 1.88E-09 |
| cg09643544 | ZNF177 | 19 | 9334696 | + | Yes | 9334695 | 0.3908 | 6.29E-10 | 3.33E-09 |
| cg19502744 | SRD5A2 | 2 | 31659419 | - | Yes | 31659544 | 0.3905 | 4.60E-10 | 2.64E-09 |
| cg21269934 | FLJ37478 | 4 | 2030017 | + | Yes | 2031384 | 0.3904 | 3.89E-10 | 2.25E-09 |
| cg09083627 | SLITRK5 | 13 | 87122598 | + | Yes | 87122870 | 0.3903 | 4.75E-10 | 2.67E-09 |
| cg10141715 | SLC5A8 | 12 | 100127584 | - | Yes | 100128147 | 0.3903 | 6.45E-10 | 3.39E-09 |
| cg06908778 | SPAG6 | 10 | 22674608 | + | Yes | 22674404 | 0.3902 | 4.89E-10 | 2.73E-09 |
| cg08453021 | ELMO1 | 7 | 37455100 | - | Yes | 37455036 | 0.3902 | 7.05E-10 | 3.67E-09 |
| cg16358738 | AGXT | 2 | 241457268 | + | No | 241456834 | 0.3899 | 4.70E-10 | 2.66E-09 |
| cg14958635 | NEUROG1 | 5 | 134898876 | - | Yes | 134899538 | 0.3899 | 4.66E-10 | 2.66E-09 |
| cg26656135 | EYA4 | 6 | 133604467 | + | Yes | 133604187 | 0.3894 | 5.91E-10 | 3.23E-09 |
| cg04534765 | GALR1 | 18 | 73091357 | + | Yes | 73090995 | 0.3893 | 6.09E-10 | 3.26E-09 |
| cg21226224 | SOX17 | 8 | 55532724 | + | Yes | 55533047 | 0.3886 | 5.70E-10 | 3.14E-09 |
| cg10300684 | FOXP1B | 14 | 28306074 | + | No | 28306037 | 0.3883 | 5.65E-10 | 3.13E-09 |
| cg11611600 | ADAMTSL3 | 15 | 82114158 | + | Yes | 82113841 | 0.3877 | 7.09E-10 | 3.67E-09 |
| cg26035366 | LRRC3B | 3 | 26639625 | + | Yes | 26639303 | 0.3867 | 6.20E-10 | 3.30E-09 |
| cg18420965 | EPHA5 | 4 | 66217740 | - | Yes | 66218248 | 0.3860 | 6.07E-10 | 3.26E-09 |
| cg08190291 | ADAMT55 | 21 | 27261313 | - | Yes | 27261310 | 0.3857 | 6.05E-10 | 3.26E-09 |
| cg19343464 | GRIA4 | 11 | 104986719 | ++ + | Yes | 104986009 104986620 | 0.3854 | 8.82E-10 | 4.43E-09 |
| cg13462129 | DLX5 | 7 | 96489217 | NA | Yes | NA | 0.3845 | 8.25E-10 | 4.17E-09 |
| cg16902509 | ITGA8 | 10 | 15801318 | - | Yes | 15801776 | 0.3843 | 7.24E-10 | 3.73E-09 |
| cg20052718 | TWIST1 | 7 | 19123427 | - | Yes | 19123820 | 0.3840 | 7.74E-10 | 3.94E-09 |
| cg26312150 | TWIST1 | 7 | 19123075 | - | Yes | 19123820 | 0.3835 | 7.55E-10 | 3.87E-09 |
| cg21331821 | ZSCAN1 | 19 | 63236961 | + | Yes | 63237245 | 0.3831 | 1.05E-09 | 5.23E-09 |
| cg17188046 | T | 6 | 166502187 | - | Yes | 166502121 | 0.3826 | 9.47E-10 | 4.73E-09 |
| cg24176563 | EYA4 | 6 | 133604469 | + | Yes | 133604187 | 0.3825 | 1.10E-09 | 5.44E-09 |
| cg03469054 | KIAA1944 | 12 | 128953814 | - | Yes | 128954165 | 0.3812 | 1.24E-09 | 6.08E-09 |
| cg27009703 | HOXA9 | 7 | 27171419 | - | Yes | 27171674 | 0.3783 | 1.30E-09 | 6.32E-09 |
| cg27188703 | FAIM2 | 12 | 48583848 | - | Yes | 48583987 | 0.3777 | 1.87E-09 | 8.96E-09 |
| cg01580681 | HAND2 | 4 | 174686591 | ++ - | Yes | 174688183 174687953 | 0.3775 | 1.74E-09 | 8.43E-09 |
| cg12128017 | EPHA10 | 1 | 38003356 | - | Yes | 38003411 | 0.3768 | 1.85E-09 | 8.92E-09 |
| cg12005098 | SLC16A12 | 10 | 91285318 | - | Yes | 91285293 | 0.3763 | 3.77E-09 | 1.73E-08 |
| cg03382304 | JAM2 | 21 | 25934047 | + | Yes | 25933459 | 0.3741 | 3.36E-09 | 1.56E-08 |
| cg15191648 | SALL3 | 18 | 74841250 | + | Yes | 74841262 | 0.3725 | 2.26E-09 | 1.07E-08 |
| cg06277657 | DGKI | 7 | 137182914 | - | Yes | 137182149 | 0.3725 | 2.15E-09 | 1.02E-08 |
| cg00902195 | SYT10 | 12 | 33483767 | - | Yes | 33484021 | 0.3718 | 2.51E-09 | 1.18E-08 |
| cg10140638 | PTPRN | 2 | 219882451 | - | Yes | 219882387 | 0.3709 | 3.33E-09 | 1.56E-08 |
| cg18691434 | GPC2 | 7 | 99613361 | ++ - | Yes | 99613473 99612926 | 0.3704 | 3.73E-09 | 1.72E-08 |
| cg08132931 | ADD2 | 2 | 70848470 | - | Yes | 70848837 | 0.3704 | 4.00E-09 | 1.81E-08 |
| cg23432345 | HOXA7 | 7 | 27162678 | - | Yes | 27162821 | 0.3703 | 4.60E-09 | 2.07E-08 |
| cg00290506 | CNIH3 | 1 | 222870849 | + | Yes | 222870801 | 0.3690 | 6.96E-09 | 2.96E-08 |
| cg13929328 | FLJ46831 | 10 | 129425888 | + | Yes | 129425527 | 0.3676 | 3.86E-09 | 1.76E-08 |
| cg13663218 | TRHDE | 12 | 70953243 | ++ - | Yes | 70952795 70953556 | 0.3673 | 6.82E-09 | 2.92E-08 |
| cg18349835 | VIPR2 | 7 | 158629868 | - | Yes | 158630410 | 0.3672 | 5.05E-09 | 2.24E-08 |
| cg23207990 | SFRP2 | 4 | 154929985 | - | Yes | 154929678 | 0.3666 | 3.91E-09 | 1.78E-08 |
| cg15337897 | FGF3 | 11 | 69343337 | - | Yes | 69343129 | 0.3655 | 4.78E-09 | 2.14E-08 |
| cg06274159 | ZFP42 | 4 | 189153861 | + | Yes | 189153918 | 0.3650 | 5.60E-09 | 2.44E-08 |
| cg02497758 | MAFB | 20 | 38750608 | - | Yes | 38751290 | 0.3649 | 5.37E-09 | 2.36E-08 |
| cg14502651 | PRH2 | 12 | 10972871 | ++ + | No | 10973101 10973100 | 0.3647 | 5.21E-09 | 2.30E-08 |
| cg14056644 | PITX2 | 4 | 111778554 | - | No | 111777957 | 0.3635 | 1.02E-08 | 4.21E-08 |
| cg23141855 | TFPI2 | 7 | 93357828 | - | Yes | 93358001 | 0.3631 | 6.51E-09 | 2.82E-08 |
| cg11835355 | APOL3 | 22 | 34891692 | - | No | 34892171 | 0.3625 | 5.58E-09 | 2.44E-08 |
| cg20415809 | ITGA4 | 2 | 182030100 | + | Yes | 182029863 | 0.3614 | 1.84E-08 | 6.81E-08 |
| cg17586860 | SSTR4 | 20 | 22963906 | + | Yes | 22964056 | 0.3613 | 8.03E-09 | 3.38E-08 |
| cg24662718 | VAV3 | 1 | 108308991 | - | Yes | 108309068 | 0.3607 | 7.61E-09 | 3.22E-08 |
| cg19674669 | LOC112937 | 11 | 133652120 | + | Yes | 133651484 | 0.3605 | 9.93E-09 | 4.12E-08 |
| cg24441911 | RBP5 | 12 | 7172255 | ++ - | No | 7174233 7172733 | 0.3597 | 6.80E-09 | 2.92E-08 |
| cg01805282 | EYA4 | 6 | 133605457 | + | Yes | 133604187 | 0.3595 | 1.26E-08 | 4.99E-08 |
| cg15760840 | HOXA11 | 7 | 27191747 | ++ - | Yes | 27191551 27191360 | 0.3588 | 9.51E-09 | 3.97E-08 |

| | | | | | | | | | |
|------------|-------------|----|-----------|------|-----|----------------------|--------|----------|----------|
| cg24176563 | EYA4 | 6 | 133604469 | + | Yes | 133604187 | 0.3825 | 1.10E-09 | 5.44E-09 |
| cg03469054 | KIAA1944 | 12 | 128953814 | - | Yes | 128954165 | 0.3812 | 1.24E-09 | 6.08E-09 |
| cg27009703 | HOXA9 | 7 | 27171419 | - | Yes | 27171674 | 0.3783 | 1.30E-09 | 6.32E-09 |
| cg27188703 | FAIM2 | 12 | 48583848 | - | Yes | 48583987 | 0.3777 | 1.87E-09 | 8.96E-09 |
| cg01580681 | HAND2 | 4 | 174686591 | + - | Yes | 174688183 174687953 | 0.3775 | 1.74E-09 | 8.43E-09 |
| cg12128017 | EPHA10 | 1 | 38003356 | - | Yes | 38003411 | 0.3768 | 1.85E-09 | 8.92E-09 |
| cg12005098 | SLC16A12 | 10 | 91285318 | - | Yes | 91285293 | 0.3763 | 3.77E-09 | 1.73E-08 |
| cg03382304 | JAM2 | 21 | 25934047 | + | Yes | 25933459 | 0.3741 | 3.36E-09 | 1.56E-08 |
| cg15191648 | SALL3 | 18 | 74841250 | + | Yes | 74841262 | 0.3725 | 2.26E-09 | 1.07E-08 |
| cg06277657 | DGKI | 7 | 137182914 | - | Yes | 137182149 | 0.3725 | 2.15E-09 | 1.02E-08 |
| cg00902195 | SYT10 | 12 | 33483767 | - | Yes | 33484021 | 0.3718 | 2.51E-09 | 1.18E-08 |
| cg10140638 | PTPRN | 2 | 219882451 | - | Yes | 219882387 | 0.3709 | 3.33E-09 | 1.56E-08 |
| cg18691434 | GPC2 | 7 | 99613361 | + - | Yes | 99613473 99612926 | 0.3704 | 3.73E-09 | 1.72E-08 |
| cg08132931 | ADD2 | 2 | 70848470 | - | Yes | 70848837 | 0.3704 | 4.00E-09 | 1.81E-08 |
| cg23432345 | HOXA7 | 7 | 27162678 | - | Yes | 27162821 | 0.3703 | 4.60E-09 | 2.07E-08 |
| cg00290506 | CNIH3 | 1 | 222870849 | + | Yes | 222870801 | 0.3690 | 6.96E-09 | 2.96E-08 |
| cg13929328 | FLJ46831 | 10 | 129425888 | + | Yes | 129425527 | 0.3676 | 3.86E-09 | 1.76E-08 |
| cg13663218 | TRHDE | 12 | 70953243 | + - | Yes | 70952795 70953556 | 0.3673 | 6.82E-09 | 2.92E-08 |
| cg18349835 | VIPR2 | 7 | 158629868 | - | Yes | 158630410 | 0.3672 | 5.05E-09 | 2.24E-08 |
| cg23207990 | SFRP2 | 4 | 154929985 | - | Yes | 154929678 | 0.3666 | 3.91E-09 | 1.78E-08 |
| cg15337897 | FGF3 | 11 | 69343337 | - | Yes | 69343129 | 0.3655 | 4.78E-09 | 2.14E-08 |
| cg06274159 | ZFP42 | 4 | 189153861 | + | Yes | 189153918 | 0.3650 | 5.60E-09 | 2.44E-08 |
| cg02497758 | MAFB | 20 | 38750608 | - | Yes | 38751290 | 0.3649 | 5.37E-09 | 2.36E-08 |
| cg14502651 | PRH2 | 12 | 10972871 | + + | No | 10973101 10973100 | 0.3647 | 5.21E-09 | 2.30E-08 |
| cg14056644 | PITX2 | 4 | 111778554 | - | No | 111777957 | 0.3635 | 1.02E-08 | 4.21E-08 |
| cg23141855 | TFPI2 | 7 | 93357828 | - | Yes | 93358001 | 0.3631 | 6.51E-09 | 2.82E-08 |
| cg11835355 | APOL3 | 22 | 34891692 | - | No | 34892171 | 0.3625 | 5.58E-09 | 2.44E-08 |
| cg20415809 | ITGA4 | 2 | 182030100 | + | Yes | 182029863 | 0.3614 | 1.84E-08 | 6.81E-08 |
| cg17586860 | SSTR4 | 20 | 22963906 | + | Yes | 22964056 | 0.3613 | 8.03E-09 | 3.38E-08 |
| cg24662718 | VAV3 | 1 | 108308991 | - | Yes | 108309068 | 0.3607 | 7.61E-09 | 3.22E-08 |
| cg19674669 | LOC112937 | 11 | 133652120 | + | Yes | 133651484 | 0.3605 | 9.93E-09 | 4.12E-08 |
| cg24441911 | RBP5 | 12 | 7172255 | + - | No | 7174233 7172733 | 0.3597 | 6.80E-09 | 2.92E-08 |
| cg01805282 | EYA4 | 6 | 133605457 | + | Yes | 133604187 | 0.3595 | 1.26E-08 | 4.99E-08 |
| cg15760840 | HOXA11 | 7 | 27191747 | + - | Yes | 27191551 27191360 | 0.3588 | 9.51E-09 | 3.97E-08 |
| cg26128092 | WDR8 | 1 | 3557410 | + - | Yes | 3558988 3556531 | 0.3583 | 1.07E-08 | 4.36E-08 |
| cg09952204 | RASGRF2 | 5 | 80292420 | + | Yes | 80292313 | 0.3576 | 1.23E-08 | 4.93E-08 |
| cg01661993 | TTYH1 | 19 | 59618778 | + | No | 59618446 | 0.3573 | 1.04E-08 | 4.28E-08 |
| cg23850212 | ZFP28 | 19 | 61741669 | + | Yes | 61742128 | 0.3572 | 1.15E-08 | 4.64E-08 |
| cg01493517 | HOM-TES-103 | 12 | 6535708 | - | Yes | 6535490 | 0.3571 | 1.12E-08 | 4.56E-08 |
| cg14896516 | CRHR2 | 7 | 30688886 | - | Yes | 30688665 | 0.3569 | 1.65E-08 | 6.28E-08 |
| cg10398682 | BNC1 | 15 | 81743023 | - | Yes | 81744472 | 0.3563 | 9.53E-09 | 3.97E-08 |
| cg06151165 | VSX1 | 20 | 25010254 | - | Yes | 25010767 | 0.3556 | 1.29E-08 | 5.08E-08 |
| cg12300353 | KCTD8 | 4 | 44145115 | - | Yes | 44145581 | 0.3549 | 1.20E-08 | 4.82E-08 |
| cg22815110 | FOXO3 | 1 | 63561521 | + | Yes | 63561317 | 0.3545 | 1.67E-08 | 6.33E-08 |
| cg19988449 | BNC1 | 15 | 81743812 | - | Yes | 81744472 | 0.3544 | 1.24E-08 | 4.94E-08 |
| cg00881370 | LOC55908 | 19 | 11209439 | + | No | 11209816 | 0.3538 | 1.28E-08 | 5.06E-08 |
| cg18722841 | PHOX2A | 11 | 71632630 | - | Yes | 71632868 | 0.3526 | 1.36E-08 | 5.33E-08 |
| cg20950011 | CIDEA | 18 | 12244377 | + + | Yes | 12244627 12244317 | 0.3524 | 1.45E-08 | 5.65E-08 |
| cg10743104 | PDPN | 1 | 13782793 | + + | Yes | 13782838 13784553 | 0.3524 | 1.86E-08 | 6.83E-08 |
| cg10190509 | CCL16 | 17 | 31332250 | - | No | 31332636 | 0.3523 | 1.47E-08 | 5.70E-08 |
| cg18335068 | ZNF677 | 19 | 58449722 | - | Yes | 58449923 | 0.3521 | 2.04E-08 | 7.40E-08 |
| cg03975694 | ZNF540 | 19 | 42734312 | + | No | 42734147 | 0.3521 | 1.57E-08 | 6.00E-08 |
| cg07103493 | SLC27A6 | 5 | 128329131 | + + | Yes | 128329111 128329108 | 0.3518 | 1.49E-08 | 5.76E-08 |
| cg16773899 | EDIL3 | 5 | 83716082 | - | Yes | 83716367 | 0.3514 | 1.84E-08 | 6.81E-08 |
| cg11667117 | CASA | 16 | 86527463 | - | No | 86527613 | 0.3510 | 1.79E-08 | 6.72E-08 |
| cg12571423 | CCNA1 | 13 | 35904748 | + + | No | 35903966 35904408 | 0.3509 | 1.81E-08 | 6.75E-08 |
| cg02919422 | SOX17 | 8 | 55533097 | + | Yes | 55533047 | 0.3507 | 1.75E-08 | 6.60E-08 |
| cg26963271 | PDE4B | 1 | 66031669 | + + | No | 66031443 66030780 | 0.3506 | 1.57E-08 | 6.00E-08 |
| cg12686016 | HOXA1 | 7 | 27102002 | - | Yes | 27102150 | 0.3496 | 2.12E-08 | 7.65E-08 |
| cg08118311 | SALL3 | 18 | 74841389 | + | Yes | 74841262 | 0.3493 | 2.64E-08 | 9.39E-08 |
| cg12420104 | DMRT3 | 9 | 967109 | + | Yes | 966963 | 0.3488 | 2.56E-08 | 9.16E-08 |
| cg21184174 | NGFB | 1 | 115682737 | - | Yes | 115682380 | 0.3485 | 2.02E-08 | 7.36E-08 |
| cg21359747 | ALDH1A3 | 15 | 99238159 | + | Yes | 99237531 | 0.3484 | 2.82E-08 | 9.98E-08 |
| cg26186727 | NETO1 | 18 | 68685514 | - - | Yes | 68683914 68685790 | 0.3474 | 1.90E-08 | 6.96E-08 |
| cg24199834 | POU4F2 | 4 | 147779576 | + | Yes | 147779494 | 0.3472 | 2.82E-08 | 9.98E-08 |
| cg19831575 | FGF4 | 11 | 69299271 | - | Yes | 69299352 | 0.3469 | 2.90E-08 | 1.02E-07 |
| cg19332710 | RIMS4 | 20 | 42872279 | - | Yes | 42872326 | 0.3469 | 4.22E-08 | 1.37E-07 |
| cg23686014 | TFPI2 | 7 | 93357860 | - | Yes | 93358001 | 0.3467 | 3.42E-08 | 1.17E-07 |
| cg24068372 | LOC349136 | 7 | 150738194 | - | Yes | 150738057 | 0.3466 | 3.31E-08 | 1.13E-07 |
| cg02523400 | SERPIND1 | 22 | 19458191 | + | No | 19458382 | 0.3458 | 3.13E-08 | 1.08E-07 |
| cg13547644 | ACTA1 | 1 | 227636231 | - | Yes | 227636466 | 0.3452 | 3.70E-08 | 1.24E-07 |
| cg06291867 | HTR7 | 10 | 92607142 | - | Yes | 92607651 | 0.3452 | 3.07E-08 | 1.07E-07 |
| cg02862362 | ARG1 | 6 | 131936795 | + | No | 131936057 | 0.3450 | 2.53E-08 | 9.11E-08 |
| cg21591742 | HOXD10 | 2 | 176689244 | + | Yes | 176689737 | 0.3449 | 3.10E-08 | 1.08E-07 |
| cg19101893 | CCDC23 | 1 | 43056449 | + - | No | 43055362 43055646 | 0.3443 | 2.95E-08 | 1.03E-07 |
| cg13060997 | CCNA1 | 13 | 35904611 | + + | No | 35903966 35904408 | 0.3439 | 4.80E-08 | 1.53E-07 |
| cg02569613 | C10orf72 | 10 | 49993133 | - | Yes | 49993565 | 0.3436 | 3.52E-08 | 1.19E-07 |
| cg15433631 | IRX2 | 5 | 2804541 | + - | Yes | 2805261 2804769 | 0.3431 | 3.90E-08 | 1.29E-07 |
| cg07778029 | HOXA9 | 7 | 27171639 | - | Yes | 27171674 | 0.3429 | 3.91E-08 | 1.29E-07 |
| cg24789424 | BDH | 3 | 198784540 | - | No | 198784591 | 0.3428 | 3.76E-08 | 1.26E-07 |
| cg03567830 | NTSR1 | 20 | 60810316 | + | Yes | 60810633 | 0.3428 | 3.24E-08 | 1.12E-07 |
| cg15540820 | EOMES | 3 | 27740287 | - | Yes | 27738789 | 0.3426 | 4.12E-08 | 1.35E-07 |
| cg06498267 | HCN1 | 5 | 45731679 | - | Yes | 45731977 | 0.3425 | 3.79E-08 | 1.26E-07 |
| cg04237663 | KCNV1 | 8 | 111056195 | - | Yes | 111056135 | 0.3424 | 3.59E-08 | 1.21E-07 |
| cg20507276 | OR2L13 | 1 | 246167223 | + | Yes | 246167115 | 0.3421 | 3.44E-08 | 1.17E-07 |
| cg03943081 | TCERG1L | 10 | 133000636 | - | Yes | 132999974 | 0.3419 | 4.22E-08 | 1.37E-07 |
| cg03399971 | INHBC | 12 | 56115114 | + | No | 56114809 | 0.3418 | 4.10E-08 | 1.35E-07 |
| cg23130254 | HOXD12 | 2 | 176672834 | + | Yes | 176672775 | 0.3414 | 4.46E-08 | 1.43E-07 |
| cg14008883 | SLC18A3 | 10 | 50488917 | + + | Yes | 50487146 50488352 | 0.3411 | 4.21E-08 | 1.37E-07 |
| cg25381844 | SH3GL3 | 15 | 81907344 | + | Yes | 81907094 | 0.3407 | 4.25E-08 | 1.37E-07 |
| cg21513553 | COL6A2 | 21 | 46343065 | + | Yes | 46342460 | 0.3396 | 9.04E-08 | 2.73E-07 |
| cg03700462 | HOXA1 | 7 | 27102209 | - | Yes | 27102150 | 0.3388 | 4.81E-08 | 1.53E-07 |
| cg13282837 | TCL1A | 14 | 95250401 | - | Yes | 95250286 | 0.3388 | 5.50E-08 | 1.74E-07 |
| cg15839448 | SFRP1 | 8 | 41285687 | - | Yes | 41286147 | 0.3379 | 6.05E-08 | 1.90E-07 |
| cg20645065 | ALPL | 1 | 21708725 | + | Yes | 21708444 | 0.3377 | 9.60E-08 | 2.88E-07 |
| cg18411898 | RPRM | 2 | 154044018 | - | No | 154043568 | 0.3368 | 6.34E-08 | 1.99E-07 |
| cg16428251 | SOX14 | 3 | 138966169 | + | Yes | 138966268 | 0.3361 | 6.57E-08 | 2.05E-07 |
| cg17834752 | KCNK9 | 8 | 140784421 | - | Yes | 140784481 | 0.3361 | 8.10E-08 | 2.48E-07 |
| cg08535373 | SLC32A1 | 20 | 36786026 | + | Yes | 36786518 | 0.3354 | 5.71E-08 | 1.80E-07 |
| cg12874092 | VIM | 10 | 17311525 | + | Yes | 17310263 | 0.3350 | 9.09E-08 | 2.73E-07 |
| cg20008332 | SOX11 | 2 | 5750620 | + | Yes | 5750249 | 0.3346 | 6.97E-08 | 2.16E-07 |
| cg19629292 | ZNF312 | 3 | 62334020 | - | Yes | 62334230 | 0.3337 | 6.96E-08 | 2.16E-07 |

| | | | | | | | | | |
|------------|-----------|----|-----------|------|-----|----------------------|--------|----------|----------|
| cg26186727 | NETO1 | 18 | 68685514 | - - | Yes | 68683914 68685790 | 0.3474 | 1.90E-08 | 6.96E-08 |
| cg24199834 | POUF2 | 4 | 147779576 | + | Yes | 147779494 | 0.3472 | 2.82E-08 | 9.98E-08 |
| cg19831575 | GF4 | 11 | 69299271 | - | Yes | 69299352 | 0.3469 | 2.90E-08 | 1.02E-07 |
| cg19332710 | RIMS4 | 20 | 42872279 | - | Yes | 42872326 | 0.3469 | 4.22E-08 | 1.37E-07 |
| cg23686014 | TFPI2 | 7 | 93357860 | - | Yes | 93358001 | 0.3467 | 3.42E-08 | 1.17E-07 |
| cg24068372 | LOC349136 | 7 | 150738194 | - | Yes | 150738057 | 0.3466 | 3.31E-08 | 1.13E-07 |
| cg02523400 | SERPIND1 | 22 | 19458191 | + | No | 19458382 | 0.3458 | 3.13E-08 | 1.08E-07 |
| cg13547644 | ACTA1 | 1 | 227636231 | - | Yes | 227636466 | 0.3452 | 3.70E-08 | 1.24E-07 |
| cg06291867 | HTR7 | 10 | 92607142 | - | Yes | 92607651 | 0.3452 | 3.07E-08 | 1.07E-07 |
| cg02862362 | ARG1 | 6 | 131936795 | + | No | 131936057 | 0.3450 | 2.53E-08 | 9.11E-08 |
| cg21591742 | HOXD10 | 2 | 176689244 | + | Yes | 176689737 | 0.3449 | 3.10E-08 | 1.08E-07 |
| cg19101893 | CCDC23 | 1 | 43056449 | + - | No | 43055362 43055646 | 0.3443 | 2.95E-08 | 1.03E-07 |
| cg13060997 | CCNA1 | 13 | 35904611 | + + | No | 35903966 35904408 | 0.3439 | 4.80E-08 | 1.53E-07 |
| cg02569613 | C1orf72 | 10 | 49993133 | - | Yes | 49993565 | 0.3436 | 3.52E-08 | 1.19E-07 |
| cg15433631 | IRX2 | 5 | 2804541 | + - | Yes | 2805261 2804769 | 0.3431 | 3.90E-08 | 1.29E-07 |
| cg07778029 | HOXA9 | 7 | 27171639 | - | Yes | 27171674 | 0.3429 | 3.91E-08 | 1.29E-07 |
| cg24789424 | BDH | 3 | 198784540 | - | No | 198784591 | 0.3428 | 3.76E-08 | 1.26E-07 |
| cg03567830 | NTSR1 | 20 | 60810316 | + | Yes | 60810633 | 0.3428 | 3.24E-08 | 1.12E-07 |
| cg15540820 | EOMES | 3 | 27740287 | - | Yes | 27738789 | 0.3426 | 4.12E-08 | 1.35E-07 |
| cg06498267 | HCN1 | 5 | 45731679 | - | Yes | 45731977 | 0.3425 | 3.79E-08 | 1.26E-07 |
| cg04237663 | KCNV1 | 8 | 111056195 | - | Yes | 111056135 | 0.3424 | 3.59E-08 | 1.21E-07 |
| cg20507276 | OR2L13 | 1 | 246167223 | + | Yes | 246167115 | 0.3421 | 3.44E-08 | 1.17E-07 |
| cg03943081 | TCERG1L | 10 | 133000636 | - | Yes | 132999974 | 0.3419 | 4.22E-08 | 1.37E-07 |
| cg03399971 | INHBC | 12 | 56115114 | + | No | 56114809 | 0.3418 | 4.10E-08 | 1.35E-07 |
| cg23130254 | HOXD12 | 2 | 176672834 | + | Yes | 176672775 | 0.3414 | 4.46E-08 | 1.43E-07 |
| cg14008883 | SLC18A3 | 10 | 50488917 | + + | Yes | 50487146 50488352 | 0.3411 | 4.21E-08 | 1.37E-07 |
| cg25381844 | SH3GL3 | 15 | 81907344 | + | Yes | 81907094 | 0.3407 | 4.25E-08 | 1.37E-07 |
| cg21513553 | COL6A2 | 21 | 46343065 | + | Yes | 46342460 | 0.3396 | 9.04E-08 | 2.73E-07 |
| cg03700462 | HOXA1 | 7 | 27102209 | - | Yes | 27102150 | 0.3388 | 4.81E-08 | 1.53E-07 |
| cg13282837 | TCL1A | 14 | 95250401 | - | Yes | 95250286 | 0.3388 | 5.50E-08 | 1.74E-07 |
| cg15839448 | SFRP1 | 8 | 41285687 | - | Yes | 41286147 | 0.3379 | 6.05E-08 | 1.90E-07 |
| cg20645065 | ALPL | 1 | 21708725 | + | Yes | 21708444 | 0.3377 | 9.60E-08 | 2.88E-07 |
| cg18411898 | RPRM | 2 | 154044018 | - | No | 154043568 | 0.3368 | 6.34E-08 | 1.99E-07 |
| cg16428251 | SOX14 | 3 | 138966169 | + | Yes | 138966268 | 0.3361 | 6.57E-08 | 2.05E-07 |
| cg17834752 | KCNK9 | 8 | 140784421 | - | Yes | 140784481 | 0.3361 | 8.10E-08 | 2.48E-07 |
| cg08535373 | SLC32A1 | 20 | 36786026 | + | Yes | 36786518 | 0.3354 | 5.71E-08 | 1.80E-07 |
| cg12874092 | VIM | 10 | 17311525 | + | Yes | 17310263 | 0.3350 | 9.09E-08 | 2.73E-07 |
| cg20008332 | SOX11 | 2 | 5750620 | + | Yes | 5750249 | 0.3346 | 6.97E-08 | 2.16E-07 |
| cg19629292 | ZNF312 | 3 | 62334020 | - | Yes | 62334230 | 0.3337 | 6.96E-08 | 2.16E-07 |
| cg07260592 | LPA | 6 | 161020112 | NA | Yes | NA | 0.3336 | 7.50E-08 | 2.31E-07 |
| cg20672044 | HPR | 16 | 70653999 | + | No | 70654625 | 0.3336 | 7.31E-08 | 2.26E-07 |
| cg18149207 | RORC | 1 | 150072258 | - | No | 150070972 | 0.3332 | 8.69E-08 | 2.64E-07 |
| cg05624932 | CRISPLD1 | 8 | 76059865 | + | No | 76059397 | 0.3323 | 1.53E-07 | 4.36E-07 |
| cg18267374 | NEF3 | 8 | 24827178 | + + | Yes | 24827178 24828359 | 0.3321 | 8.69E-08 | 2.64E-07 |
| cg02774439 | HAND2 | 4 | 174687826 | + - | Yes | 174688183 174687953 | 0.3311 | 8.92E-08 | 2.70E-07 |
| cg25764191 | INA | 10 | 105027205 | + | Yes | 105026909 | 0.3306 | 1.37E-07 | 3.95E-07 |
| cg23710218 | MSC | 8 | 72919210 | - | Yes | 72919285 | 0.3294 | 1.19E-07 | 3.51E-07 |
| cg15748507 | PRLHR | 10 | 120344617 | - | Yes | 120345150 | 0.3294 | 1.03E-07 | 3.07E-07 |
| cg02164046 | SST | 3 | 188870842 | - | Yes | 188870895 | 0.3290 | 1.11E-07 | 3.31E-07 |
| cg02097420 | HRG | 3 | 187866568 | + | No | 187866491 | 0.3290 | 1.13E-07 | 3.33E-07 |
| cg25942450 | TLX3 | 5 | 170668856 | + | Yes | 170668892 | 0.3287 | 1.32E-07 | 3.85E-07 |
| cg21238818 | GALST3 | 11 | 65573218 | - | Yes | 65573227 | 0.3285 | 1.61E-07 | 4.56E-07 |
| cg10730712 | COL23A1 | 5 | 177950433 | - | No | 177950162 | 0.3285 | 2.11E-07 | 5.84E-07 |
| cg27436184 | APOC2 | 19 | 50140846 | + | No | 50141082 | 0.3284 | 1.12E-07 | 3.31E-07 |
| cg26721264 | GALR1 | 18 | 73090715 | + | Yes | 73090995 | 0.3279 | 1.22E-07 | 3.56E-07 |
| cg11525285 | CHX10 | 14 | 73776089 | + | Yes | 73775927 | 0.3269 | 1.27E-07 | 3.71E-07 |
| cg09688546 | GLRB | 4 | 158216813 | + + | Yes | 158216726 158217004 | 0.3266 | 1.44E-07 | 4.12E-07 |
| cg04317399 | HOXA4 | 7 | 27136838 | - | Yes | 27136924 | 0.3257 | 1.39E-07 | 3.98E-07 |
| cg03538436 | NOS1 | 12 | 116283753 | - | Yes | 116283965 | 0.3256 | 1.34E-07 | 3.86E-07 |
| cg26069745 | HOXA2 | 7 | 27108725 | - | No | 27108919 | 0.3254 | 2.06E-07 | 5.72E-07 |
| cg26024843 | COL5A1 | 9 | 136673770 | + | Yes | 136673472 | 0.3254 | 1.34E-07 | 3.86E-07 |
| cg00250430 | DMRT2 | 9 | 1041579 | + | No | 1040619 | 0.3248 | 1.58E-07 | 4.50E-07 |
| cg13234863 | KIAA1944 | 12 | 128955091 | - | Yes | 128954165 | 0.3242 | 1.67E-07 | 4.70E-07 |
| cg25778166 | FMO3 | 1 | 169326559 | + | No | 169326641 | 0.3238 | 1.69E-07 | 4.74E-07 |
| cg20134215 | MCHR2 | 6 | 100548128 | - - | Yes | 100548835 100548820 | 0.3231 | 1.66E-07 | 4.68E-07 |
| cg13323752 | SLC2A14 | 12 | 7916834 | - | Yes | 7916762 | 0.3220 | 2.05E-07 | 5.71E-07 |
| cg07271264 | MYOD1 | 11 | 17697553 | + | Yes | 17697685 | 0.3219 | 2.71E-07 | 7.41E-07 |
| cg20286200 | EYA4 | 6 | 133603960 | + | Yes | 133604187 | 0.3219 | 2.98E-07 | 8.04E-07 |
| cg22674717 | SALL1 | 16 | 49742895 | - - | Yes | 49742009 49742684 | 0.3217 | 2.78E-07 | 7.57E-07 |
| cg04784672 | LRFN5 | 14 | 41147424 | + | No | 41146513 | 0.3204 | 2.21E-07 | 6.11E-07 |
| cg23326689 | STMN2 | 8 | 80686016 | + | No | 80685934 | 0.3203 | 2.53E-07 | 6.95E-07 |
| cg01614759 | ZNF22 | 10 | 44815441 | + - | No | 44816278 44816342 | 0.3201 | 2.98E-07 | 8.04E-07 |
| cg17892556 | ZNF625 | 19 | 12128464 | - | Yes | 12128529 | 0.3197 | 4.14E-07 | 1.08E-06 |
| cg20113732 | NELL1 | 11 | 20647756 | + | Yes | 20647692 | 0.3177 | 3.30E-07 | 8.84E-07 |
| cg20404387 | FAM43B | 1 | 20751883 | + | Yes | 20751518 | 0.3173 | 4.70E-07 | 1.20E-06 |
| cg16638540 | ZNF135 | 19 | 63262280 | + | Yes | 63262418 | 0.3170 | 2.67E-07 | 7.31E-07 |
| cg20080624 | DLX5 | 7 | 96489047 | NA | Yes | NA | 0.3169 | 3.48E-07 | 9.27E-07 |
| cg17233506 | HOXB1 | 17 | 43963292 | - | Yes | 43963271 | 0.3168 | 2.85E-07 | 7.73E-07 |
| cg16422907 | CCNA1 | 13 | 35904734 | + + | No | 35903966 35904408 | 0.3163 | 3.33E-07 | 8.89E-07 |
| cg11812218 | GHSR | 3 | 173649614 | - | No | 173648897 | 0.3159 | 3.27E-07 | 8.79E-07 |
| cg10298815 | GPR88 | 1 | 100777062 | + | Yes | 100776315 | 0.3150 | 3.95E-07 | 1.04E-06 |
| cg15310162 | CLDN14 | 21 | 36774692 | - | No | 36774258 | 0.3149 | 4.08E-07 | 1.07E-06 |
| cg12799895 | NPTX2 | 7 | 98084588 | + | Yes | 98084532 | 0.3140 | 3.79E-07 | 1.00E-06 |
| cg05839235 | NPR3 | 5 | 32747994 | + | Yes | 32747421 | 0.3137 | 4.25E-07 | 1.10E-06 |
| cg03498559 | UGT2B4 | 4 | 70395651 | - | No | 70396215 | 0.3136 | 3.73E-07 | 9.90E-07 |
| cg10238818 | CYYR1 | 21 | 26867425 | - | Yes | 26867452 | 0.3130 | 3.83E-07 | 1.01E-06 |
| cg27292431 | SLC22A1 | 6 | 160463251 | + | No | 160462852 | 0.3128 | 4.16E-07 | 1.08E-06 |
| cg24250393 | PRKCB1 | 16 | 23754339 | + | Yes | 23754800 | 0.3125 | 4.76E-07 | 1.21E-06 |
| cg17647273 | UPB1 | 22 | 23221452 | + | Yes | 23221250 | 0.3124 | 3.86E-07 | 1.01E-06 |
| cg00509670 | PAX9 | 14 | 36200064 | NA | No | NA | 0.3122 | 4.42E-07 | 1.13E-06 |
| cg18877506 | PDPN | 1 | 13783142 | + + | Yes | 13782838 13784553 | 0.3119 | 4.92E-07 | 1.25E-06 |
| cg11530960 | DMRT2 | 9 | 1042239 | + | Yes | 1040619 | 0.3115 | 4.62E-07 | 1.18E-06 |

| | | | | | | | | | |
|------------|----------|----|-----------|-----|-----|---------------------|--------|----------|----------|
| cg10730712 | COL23A1 | 5 | 177950433 | - | No | 177950162 | 0.3285 | 2.11E-07 | 5.84E-07 |
| cg27436184 | APOC2 | 19 | 50140846 | + | No | 50141082 | 0.3284 | 1.12E-07 | 3.31E-07 |
| cg26721264 | GALR1 | 18 | 73090715 | + | Yes | 73090995 | 0.3279 | 1.22E-07 | 3.56E-07 |
| cg11525285 | CHX10 | 14 | 73776089 | + | Yes | 73775927 | 0.3269 | 1.27E-07 | 3.71E-07 |
| cg09688546 | GLRB | 4 | 158216813 | ++ | Yes | 158216726 158217004 | 0.3266 | 1.44E-07 | 4.12E-07 |
| cg04317399 | HOXA4 | 7 | 27136838 | - | Yes | 27136924 | 0.3257 | 1.39E-07 | 3.98E-07 |
| cg03538436 | NOS1 | 12 | 116283753 | - | Yes | 116283965 | 0.3256 | 1.34E-07 | 3.86E-07 |
| cg26069745 | HOXA2 | 7 | 27108725 | - | No | 27108919 | 0.3254 | 2.06E-07 | 5.72E-07 |
| cg26024843 | COL5A1 | 9 | 136673770 | + | Yes | 136673472 | 0.3254 | 1.34E-07 | 3.86E-07 |
| cg00250430 | DMRT2 | 9 | 1041579 | + | No | 1040619 | 0.3248 | 1.58E-07 | 4.50E-07 |
| cg13234863 | KIAA1944 | 12 | 128955091 | - | Yes | 128954165 | 0.3242 | 1.67E-07 | 4.70E-07 |
| cg25778166 | FMO3 | 1 | 169326559 | + | No | 169326641 | 0.3238 | 1.69E-07 | 4.74E-07 |
| cg20134215 | MCHR2 | 6 | 100548128 | -- | Yes | 100548835 100548820 | 0.3231 | 1.66E-07 | 4.68E-07 |
| cg13323752 | SLC2A14 | 12 | 7916834 | - | Yes | 7916762 | 0.3220 | 2.05E-07 | 5.71E-07 |
| cg07271264 | MYOD1 | 11 | 17697553 | + | Yes | 17697685 | 0.3219 | 2.71E-07 | 7.41E-07 |
| cg20286200 | EYA4 | 6 | 133603960 | + | Yes | 133604187 | 0.3219 | 2.98E-07 | 8.04E-07 |
| cg22674717 | SALL1 | 16 | 49742895 | -- | Yes | 49742009 49742684 | 0.3217 | 2.78E-07 | 7.57E-07 |
| cg04784672 | LRFN5 | 14 | 41147424 | + | No | 41146513 | 0.3204 | 2.21E-07 | 6.11E-07 |
| cg23326689 | STMN2 | 8 | 80686016 | + | No | 80685934 | 0.3203 | 2.53E-07 | 6.95E-07 |
| cg01614759 | ZNF22 | 10 | 44815441 | +- | No | 44816278 44816342 | 0.3201 | 2.98E-07 | 8.04E-07 |
| cg17892556 | ZNF625 | 19 | 12128464 | - | Yes | 12128529 | 0.3197 | 4.14E-07 | 1.08E-06 |
| cg20113732 | NELL1 | 11 | 20647756 | + | Yes | 20647692 | 0.3177 | 3.30E-07 | 8.84E-07 |
| cg20404387 | FAM43B | 1 | 20751883 | + | Yes | 20751518 | 0.3173 | 4.70E-07 | 1.20E-06 |
| cg16638540 | ZNF135 | 19 | 63262280 | + | Yes | 63262418 | 0.3170 | 2.67E-07 | 7.31E-07 |
| cg20080624 | DLX5 | 7 | 96489047 | NA | Yes | NA | 0.3169 | 3.48E-07 | 9.27E-07 |
| cg17233506 | HOXB1 | 17 | 43963292 | - | Yes | 43963271 | 0.3168 | 2.85E-07 | 7.73E-07 |
| cg16422907 | CCNA1 | 13 | 35904734 | +++ | No | 35903966 35904408 | 0.3163 | 3.33E-07 | 8.89E-07 |
| cg11812218 | GHSR | 3 | 173649614 | - | No | 173648897 | 0.3159 | 3.27E-07 | 8.79E-07 |
| cg10298815 | GPR88 | 1 | 100777062 | + | Yes | 100776315 | 0.3150 | 3.95E-07 | 1.04E-06 |
| cg15310162 | CLDN14 | 21 | 36774692 | - | No | 36774258 | 0.3149 | 4.08E-07 | 1.07E-06 |
| cg12799895 | NPTX2 | 7 | 98084588 | + | Yes | 98084532 | 0.3140 | 3.79E-07 | 1.00E-06 |
| cg05839235 | NPR3 | 5 | 32747994 | + | Yes | 32747421 | 0.3137 | 4.25E-07 | 1.10E-06 |
| cg03498559 | UGT2B4 | 4 | 70395651 | - | No | 70396215 | 0.3136 | 3.73E-07 | 9.90E-07 |
| cg10238818 | CYYR1 | 21 | 26867425 | - | Yes | 26867452 | 0.3130 | 3.83E-07 | 1.01E-06 |
| cg27292431 | SLC22A1 | 6 | 160463251 | + | No | 160462852 | 0.3128 | 4.16E-07 | 1.08E-06 |
| cg24250393 | PRKCB1 | 16 | 23754339 | + | Yes | 23754800 | 0.3125 | 4.76E-07 | 1.21E-06 |
| cg17647273 | UPB1 | 22 | 23221452 | + | Yes | 23221250 | 0.3124 | 3.86E-07 | 1.01E-06 |
| cg00509670 | PAX9 | 14 | 36200064 | NA | No | NA | 0.3122 | 4.42E-07 | 1.13E-06 |
| cg18877506 | PDPN | 1 | 13783142 | +++ | Yes | 13782838 13784553 | 0.3119 | 4.92E-07 | 1.25E-06 |
| cg11530960 | DMRT2 | 9 | 1042239 | + | Yes | 1040619 | 0.3115 | 4.62E-07 | 1.18E-06 |
| cg16254309 | CNTNAP2 | 7 | 145445085 | + | Yes | 145444385 | 0.3110 | 5.64E-07 | 1.42E-06 |
| cg20118424 | ABCB11 | 2 | 169595521 | - | No | 169596079 | 0.3107 | 4.41E-07 | 1.13E-06 |
| cg07109287 | LHX2 | 9 | 125813894 | + | Yes | 125813709 | 0.3103 | 6.73E-07 | 1.65E-06 |
| cg09736922 | THPO | 3 | 185578670 | +- | No | 185580554 185578626 | 0.3102 | 6.54E-07 | 1.62E-06 |
| cg06675478 | SOX1 | 13 | 111769787 | + | Yes | 111769913 | 0.3094 | 5.58E-07 | 1.41E-06 |
| cg26831415 | EFHA2 | 8 | 16929641 | + | Yes | 16929117 | 0.3090 | 5.92E-07 | 1.48E-06 |
| cg00410895 | CCDC23 | 1 | 43056471 | +- | No | 43055362 43055646 | 0.3090 | 5.63E-07 | 1.42E-06 |
| cg00201234 | FBLN2 | 3 | 13565968 | + | Yes | 13565624 | 0.3087 | 6.00E-07 | 1.49E-06 |
| cg05774801 | SFRP2 | 4 | 154929206 | - | Yes | 154929678 | 0.3085 | 6.02E-07 | 1.49E-06 |
| cg07603484 | IL4I1 | 19 | 55125991 | -- | No | 55124598 55124574 | 0.3085 | 5.78E-07 | 1.45E-06 |
| cg13202751 | SLC6A3 | 5 | 1499443 | - | Yes | 1498538 | 0.3084 | 7.17E-07 | 1.73E-06 |
| cg14950072 | LAMA1 | 18 | 7108122 | - | Yes | 7107813 | 0.3075 | 6.62E-07 | 1.63E-06 |
| cg02008154 | TBX20 | 7 | 35260062 | - | Yes | 35260236 | 0.3067 | 7.11E-07 | 1.73E-06 |
| cg04072323 | SKIP | 2 | 228754569 | - | Yes | 228754605 | 0.3065 | 6.68E-07 | 1.64E-06 |
| cg04267184 | GNRH2 | 20 | 2971418 | + | No | 2972267 | 0.3064 | 6.61E-07 | 1.63E-06 |
| cg12614105 | NPY | 7 | 24290960 | + | Yes | 24290333 | 0.3063 | 8.00E-07 | 1.92E-06 |
| cg16708981 | ZNF677 | 19 | 58450421 | - | No | 58449923 | 0.3062 | 7.57E-07 | 1.82E-06 |
| cg11099899 | CLDN14 | 21 | 36774204 | - | No | 36774258 | 0.3055 | 8.17E-07 | 1.94E-06 |
| cg21621248 | LRRTM1 | 2 | 80385353 | - | Yes | 80384998 | 0.3055 | 7.04E-07 | 1.71E-06 |
| cg18338296 | THRSF | 11 | 77452692 | + | No | 77452554 | 0.3054 | 8.03E-07 | 1.92E-06 |
| cg13589108 | FAM5B | 1 | 175407303 | + | No | 175407255 | 0.3050 | 7.18E-07 | 1.73E-06 |
| cg00949442 | ABCA3 | 16 | 2331829 | +- | Yes | 2330923 2330748 | 0.3050 | 8.78E-07 | 2.06E-06 |
| cg22647018 | AGT | 1 | 228916142 | - | No | 228916959 | 0.3048 | 8.03E-07 | 1.92E-06 |
| cg05396987 | FLJ30834 | 4 | 122905719 | +- | Yes | 122905189 122905790 | 0.3045 | 9.89E-07 | 2.28E-06 |
| cg27352992 | CNTN1 | 12 | 39373359 | + | Yes | 39372624 | 0.3045 | 8.19E-07 | 1.94E-06 |
| cg13985639 | C10orf65 | 10 | 99334959 | NA | No | NA | 0.3045 | 8.55E-07 | 2.02E-06 |
| cg07364841 | HGFAC | 4 | 3413945 | + | No | 3413523 | 0.3040 | 8.77E-07 | 2.06E-06 |
| cg16391792 | LIPC | 15 | 56510949 | + | No | 56511466 | 0.3037 | 1.24E-06 | 2.80E-06 |
| cg11647681 | PCDHGA12 | 5 | 140790345 | + | No | 140790341 | 0.3036 | 8.95E-07 | 2.09E-06 |
| cg12109455 | DPYSL4 | 10 | 133850727 | + | Yes | 133850403 | 0.3031 | 8.07E-07 | 1.92E-06 |
| cg06165395 | GRIK3 | 1 | 37273377 | - | No | 37272431 | 0.3026 | 9.60E-07 | 2.23E-06 |
| cg01566404 | ETNK2 | 1 | 202388548 | - | No | 202387930 | 0.3026 | 8.79E-07 | 2.06E-06 |
| cg08747377 | CDH13 | 16 | 81218171 | + | Yes | 81218078 | 0.3025 | 9.71E-07 | 2.25E-06 |
| cg17923358 | RELN | 7 | 103416854 | - | Yes | 103417199 | 0.3024 | 1.08E-06 | 2.46E-06 |
| cg10764357 | BCAT1 | 12 | 24993339 | - | Yes | 24993575 | 0.3023 | 1.04E-06 | 2.38E-06 |
| cg07644368 | CDO1 | 5 | 115180684 | - | Yes | 115180304 | 0.3018 | 9.60E-07 | 2.23E-06 |
| cg20050826 | KGIRS2 | 12 | 51281562 | - | Yes | 51281589 | 0.3016 | 9.98E-07 | 2.29E-06 |
| cg21376883 | ACTN2 | 1 | 234916855 | + | Yes | 234916392 | 0.3013 | 1.06E-06 | 2.42E-06 |
| cg00767581 | HOXD4 | 2 | 176723371 | +++ | Yes | 176724358 176723276 | 0.3008 | 1.07E-06 | 2.43E-06 |
| cg07361385 | AHSG | 3 | 187813720 | + | No | 187813543 | 0.3006 | 1.06E-06 | 2.41E-06 |
| cg19526600 | DIO1 | 1 | 54132703 | + | No | 54132448 | 0.3001 | 1.29E-06 | 2.91E-06 |
| cg05718253 | LOC55908 | 19 | 11208359 | + | No | 11209816 | 0.3000 | 1.23E-06 | 2.77E-06 |
| cg04005707 | FLJ21511 | 4 | 48683078 | + | Yes | 48683021 | 0.2994 | 1.77E-06 | 3.82E-06 |
| cg18592174 | CHAT | 10 | 50487312 | +++ | Yes | 50487146 50488352 | 0.2980 | 1.41E-06 | 3.15E-06 |

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|------------|-----------|----|-----------|------|-----|---------------------|--------|----------|----------|
| cg09736922 | THPO | 3 | 185578670 | + - | No | 185580554 185578626 | 0.3102 | 6.54E-07 | 1.62E-06 |
| cg06675478 | SOX1 | 13 | 111769787 | + | Yes | 111769913 | 0.3094 | 5.58E-07 | 1.41E-06 |
| cg26831415 | EFHA2 | 8 | 16929641 | + | Yes | 16929117 | 0.3090 | 5.92E-07 | 1.48E-06 |
| cg00410895 | CCDC23 | 1 | 43056471 | + - | No | 43055362 43055646 | 0.3090 | 5.63E-07 | 1.42E-06 |
| cg00201234 | FBLN2 | 3 | 13565968 | + | Yes | 13565624 | 0.3087 | 6.00E-07 | 1.49E-06 |
| cg05774801 | SFRP2 | 4 | 154929206 | - | Yes | 154929678 | 0.3085 | 6.02E-07 | 1.49E-06 |
| cg07603484 | IL4I1 | 19 | 55125991 | - - | No | 55124598 55124574 | 0.3085 | 5.78E-07 | 1.45E-06 |
| cg13202751 | SLC6A3 | 5 | 1499443 | - | Yes | 1498538 | 0.3084 | 7.17E-07 | 1.73E-06 |
| cg14950072 | LAMA1 | 18 | 7108122 | - | Yes | 7107813 | 0.3075 | 6.62E-07 | 1.63E-06 |
| cg02008154 | TBX20 | 7 | 35260062 | - | Yes | 35260236 | 0.3067 | 7.11E-07 | 1.73E-06 |
| cg04072323 | SKIP | 2 | 228754569 | - | Yes | 228754605 | 0.3065 | 6.68E-07 | 1.64E-06 |
| cg04267184 | GNRH2 | 20 | 2971418 | + | No | 2972267 | 0.3064 | 6.61E-07 | 1.63E-06 |
| cg12614105 | NPY | 7 | 24290960 | + | Yes | 24290333 | 0.3063 | 8.00E-07 | 1.92E-06 |
| cg16708981 | ZNF677 | 19 | 58450421 | - | No | 58449923 | 0.3062 | 7.57E-07 | 1.82E-06 |
| cg11099899 | CLDN14 | 21 | 36774204 | - | No | 36774258 | 0.3055 | 8.17E-07 | 1.94E-06 |
| cg21621248 | LRRTM1 | 2 | 80385353 | - | Yes | 80384998 | 0.3055 | 7.04E-07 | 1.71E-06 |
| cg18338296 | THRSP | 11 | 77452692 | + | No | 77452554 | 0.3054 | 8.03E-07 | 1.92E-06 |
| cg13589108 | FAM5B | 1 | 175407303 | + | No | 175407255 | 0.3050 | 7.18E-07 | 1.73E-06 |
| cg00949442 | ABCA3 | 16 | 2331829 | + - | Yes | 2330923 2330748 | 0.3050 | 8.78E-07 | 2.06E-06 |
| cg22647018 | AGT | 1 | 228916142 | - | No | 228916959 | 0.3048 | 8.03E-07 | 1.92E-06 |
| cg05396987 | FLJ30834 | 4 | 122905719 | + - | Yes | 122905189 122905790 | 0.3045 | 9.89E-07 | 2.28E-06 |
| cg27352992 | CNTN1 | 12 | 39373359 | + | Yes | 39372624 | 0.3045 | 8.19E-07 | 1.94E-06 |
| cg13985639 | C10orf65 | 10 | 99334959 | NA | No | NA | 0.3045 | 8.55E-07 | 2.02E-06 |
| cg07364841 | HGFAC | 4 | 3413945 | + | No | 3413523 | 0.3040 | 8.77E-07 | 2.06E-06 |
| cg16391792 | LIPC | 15 | 56510949 | + | No | 56511466 | 0.3037 | 1.24E-06 | 2.80E-06 |
| cg11647681 | PCDHGA12 | 5 | 140790345 | + | No | 140790341 | 0.3036 | 8.95E-07 | 2.09E-06 |
| cg12109455 | DPYSL4 | 10 | 133850727 | + | Yes | 133850403 | 0.3031 | 8.07E-07 | 1.92E-06 |
| cg06165395 | GRIK3 | 1 | 37273377 | - | No | 37272431 | 0.3026 | 9.60E-07 | 2.23E-06 |
| cg01566404 | ETNK2 | 1 | 202388548 | - | No | 202387930 | 0.3026 | 8.79E-07 | 2.06E-06 |
| cg08747377 | CDH13 | 16 | 81218171 | + | Yes | 81218078 | 0.3025 | 9.71E-07 | 2.25E-06 |
| cg17923358 | RELN | 7 | 103416854 | - | Yes | 103417199 | 0.3024 | 1.08E-06 | 2.46E-06 |
| cg10764357 | BCAT1 | 12 | 24993339 | - | Yes | 24993575 | 0.3023 | 1.04E-06 | 2.38E-06 |
| cg07644368 | CDO1 | 5 | 115180684 | - | Yes | 115180304 | 0.3018 | 9.60E-07 | 2.23E-06 |
| cg20050826 | KGIRS2 | 12 | 51281562 | - | Yes | 51281589 | 0.3016 | 9.98E-07 | 2.29E-06 |
| cg21376883 | ACTN2 | 1 | 234916855 | + | Yes | 234916392 | 0.3013 | 1.06E-06 | 2.42E-06 |
| cg00767581 | HOXD4 | 2 | 176723371 | + + | Yes | 176724358 176723276 | 0.3008 | 1.07E-06 | 2.43E-06 |
| cg07361385 | AHSG | 3 | 187813720 | + | No | 187813543 | 0.3006 | 1.06E-06 | 2.41E-06 |
| cg19526600 | DIO1 | 1 | 54132703 | + | No | 54132448 | 0.3001 | 1.29E-06 | 2.91E-06 |
| cg05718253 | LOC55908 | 19 | 11208359 | + | No | 11209816 | 0.3000 | 1.23E-06 | 2.77E-06 |
| cg04005707 | FLJ21511 | 4 | 48683078 | + | Yes | 48683021 | 0.2994 | 1.77E-06 | 3.82E-06 |
| cg18592174 | CHAT | 10 | 50487312 | + + | Yes | 50487146 50488352 | 0.2980 | 1.41E-06 | 3.15E-06 |
| cg15156078 | RASGRF1 | 15 | 77170468 | - | Yes | 77170270 | 0.2980 | 1.43E-06 | 3.18E-06 |
| cg26822241 | CYP2C9 | 10 | 96687651 | + | No | 96688404 | 0.2977 | 1.39E-06 | 3.11E-06 |
| cg20967028 | ART4 | 12 | 14887539 | - | No | 14887680 | 0.2975 | 1.49E-06 | 3.29E-06 |
| cg12741420 | IRF4 | 6 | 337131 | + + | Yes | 336751 337018 | 0.2975 | 1.48E-06 | 3.29E-06 |
| cg13262687 | POU4F2 | 4 | 147779029 | + | Yes | 147779494 | 0.2969 | 1.64E-06 | 3.57E-06 |
| cg26301689 | PAQR9 | 3 | 144164394 | - | Yes | 144164868 | 0.2968 | 1.55E-06 | 3.43E-06 |
| cg16297030 | AGXT2 | 5 | 35083703 | - | No | 35083833 | 0.2967 | 1.56E-06 | 3.44E-06 |
| cg14611174 | SIX6 | 14 | 60045590 | + | Yes | 60045690 | 0.2957 | 1.59E-06 | 3.48E-06 |
| cg01936555 | SLC17A2 | 6 | 26039184 | - | No | 26038818 | 0.2956 | 1.62E-06 | 3.54E-06 |
| cg12624523 | GPLD1 | 6 | 24597749 | - - | No | 24597778 24597829 | 0.2953 | 1.62E-06 | 3.54E-06 |
| cg00503840 | DLX5 | 7 | 96488445 | NA | Yes | NA | 0.2950 | 1.58E-06 | 3.47E-06 |
| cg02248486 | HOXA5 | 7 | 27149721 | - | Yes | 27149812 | 0.2947 | 2.08E-06 | 4.42E-06 |
| cg08380205 | SPSB4 | 3 | 142252381 | + | No | 142253432 | 0.2939 | 1.82E-06 | 3.93E-06 |
| cg04999691 | C7orf29 | 7 | 149657983 | + | No | 149657870 | 0.2939 | 1.95E-06 | 4.19E-06 |
| cg23097006 | VSX1 | 20 | 25011817 | - | Yes | 25010767 | 0.2938 | 2.69E-06 | 5.61E-06 |
| cg22187630 | CACNA1A | 19 | 13477871 | - | Yes | 13478274 | 0.2938 | 1.74E-06 | 3.77E-06 |
| cg03874199 | HOXD12 | 2 | 176672702 | + | Yes | 176672775 | 0.2938 | 2.14E-06 | 4.52E-06 |
| cg00662556 | GALR1 | 18 | 73092352 | + | Yes | 73090995 | 0.2933 | 2.02E-06 | 4.32E-06 |
| cg19378133 | A2BP1 | 16 | 6008836 | + | Yes | 6009132 | 0.2928 | 1.95E-06 | 4.19E-06 |
| cg09634469 | SERPIND1 | 22 | 19458411 | + | No | 19458382 | 0.2924 | 2.28E-06 | 4.81E-06 |
| cg21022395 | SHOC2 | 10 | 112712430 | + | No | 112713872 | 0.2920 | 2.04E-06 | 4.35E-06 |
| cg07703401 | HBQ1 | 16 | 170341 | + | Yes | 170334 | 0.2916 | 2.24E-06 | 4.73E-06 |
| cg05788638 | SERPINA10 | 14 | 93828773 | - - | No | 93829349 93829114 | 0.2913 | 2.09E-06 | 4.44E-06 |
| cg17108819 | CD8A | 2 | 86871464 | - | Yes | 86872348 | 0.2909 | 3.96E-06 | 7.90E-06 |
| cg05899618 | GDF7 | 2 | 20729328 | + | Yes | 20729904 | 0.2909 | 2.29E-06 | 4.81E-06 |
| cg05766474 | CCL16 | 17 | 31332781 | - | No | 31332636 | 0.2904 | 2.94E-06 | 6.09E-06 |
| cg14377593 | TFPI2 | 7 | 93358119 | - | Yes | 93358001 | 0.2895 | 2.58E-06 | 5.40E-06 |
| cg25084878 | FBN2 | 5 | 127901610 | - | Yes | 127901634 | 0.2893 | 2.71E-06 | 5.63E-06 |
| cg06781209 | FADS2 | 11 | 61351573 | + | Yes | 61352288 | 0.2889 | 3.84E-06 | 7.74E-06 |
| cg16994506 | CCND2 | 12 | 4253985 | + | Yes | 4253162 | 0.2886 | 3.68E-06 | 7.42E-06 |
| cg00465284 | LRRTM1 | 2 | 80385409 | - | No | 80384998 | 0.2885 | 2.62E-06 | 5.48E-06 |
| cg14323109 | KDR | 4 | 55686700 | - | Yes | 55686519 | 0.2884 | 3.14E-06 | 6.44E-06 |
| cg18063149 | FMO3 | 1 | 169326695 | + | No | 169326641 | 0.2882 | 2.92E-06 | 6.05E-06 |
| cg23642747 | INA | 10 | 105026635 | + | Yes | 105026909 | 0.2881 | 3.34E-06 | 6.79E-06 |
| cg15489294 | FLJ90650 | 5 | 115325752 | + | Yes | 115326049 | 0.2879 | 3.22E-06 | 6.58E-06 |
| cg15343119 | GALR1 | 18 | 73090773 | + | Yes | 73090995 | 0.2871 | 3.21E-06 | 6.58E-06 |

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|------------|-----------|----|-----------|-----------|-----|--------------------------------|--------|----------|----------|
| cg19526600 | DIO1 | 1 | 54132703 | + | No | 54132448 | 0.3001 | 1.29E-06 | 2.91E-06 |
| cg05718253 | LOC55908 | 19 | 11208359 | + | No | 11209816 | 0.3000 | 1.23E-06 | 2.77E-06 |
| cg04005707 | FLJ21511 | 4 | 48683078 | + | Yes | 48683021 | 0.2994 | 1.77E-06 | 3.82E-06 |
| cg18592174 | CHAT | 10 | 50487312 | + + | Yes | 50487146 50488352 | 0.2980 | 1.41E-06 | 3.15E-06 |
| cg15156078 | RASGRF1 | 15 | 77170468 | - | Yes | 77170270 | 0.2980 | 1.43E-06 | 3.18E-06 |
| cg26822241 | CYP2C9 | 10 | 96687651 | + | No | 96688404 | 0.2977 | 1.39E-06 | 3.11E-06 |
| cg20967028 | ART4 | 12 | 14887539 | - | No | 14887680 | 0.2975 | 1.49E-06 | 3.29E-06 |
| cg12741420 | IRF4 | 6 | 337131 | + + | Yes | 336751 337018 | 0.2975 | 1.48E-06 | 3.29E-06 |
| cg13262687 | POU4F2 | 4 | 147779029 | + | Yes | 147779494 | 0.2969 | 1.64E-06 | 3.57E-06 |
| cg26301689 | PAQR9 | 3 | 144164394 | - | Yes | 144164868 | 0.2968 | 1.55E-06 | 3.43E-06 |
| cg16297030 | AGXT2 | 5 | 35083703 | - | No | 35083833 | 0.2967 | 1.56E-06 | 3.44E-06 |
| cg14611174 | SIX6 | 14 | 60045590 | + | Yes | 60045690 | 0.2957 | 1.59E-06 | 3.48E-06 |
| cg01936555 | SLC17A2 | 6 | 26039184 | - | No | 26038818 | 0.2956 | 1.62E-06 | 3.54E-06 |
| cg12624523 | GPLD1 | 6 | 24597749 | - - | No | 24597778 24597829 | 0.2953 | 1.62E-06 | 3.54E-06 |
| cg00503840 | DLX5 | 7 | 96488445 | NA | Yes | NA | 0.2950 | 1.58E-06 | 3.47E-06 |
| cg02248486 | HOXA5 | 7 | 27149721 | - | Yes | 27149812 | 0.2947 | 2.08E-06 | 4.42E-06 |
| cg08380205 | SPSB4 | 3 | 142252381 | + | No | 142253432 | 0.2939 | 1.82E-06 | 3.93E-06 |
| cg04999691 | C7orf29 | 7 | 149657983 | + | No | 149657870 | 0.2939 | 1.95E-06 | 4.19E-06 |
| cg23097006 | VSX1 | 20 | 25011817 | - | Yes | 25010767 | 0.2938 | 2.69E-06 | 5.61E-06 |
| cg22187630 | CACNA1A | 19 | 13477871 | - | Yes | 13478274 | 0.2938 | 1.74E-06 | 3.77E-06 |
| cg03874199 | HOXD12 | 2 | 176672702 | + | Yes | 176672775 | 0.2938 | 2.14E-06 | 4.52E-06 |
| cg00662556 | GALR1 | 18 | 73092352 | + | Yes | 73090995 | 0.2933 | 2.02E-06 | 4.32E-06 |
| cg19378133 | A2BP1 | 16 | 6008836 | + | Yes | 6009132 | 0.2928 | 1.95E-06 | 4.19E-06 |
| cg09634469 | SERPIND1 | 22 | 19458411 | + | No | 19458382 | 0.2924 | 2.28E-06 | 4.81E-06 |
| cg21022395 | SHOC2 | 10 | 112712430 | + | No | 112713872 | 0.2920 | 2.04E-06 | 4.35E-06 |
| cg07703401 | HBQ1 | 16 | 170341 | + | Yes | 170334 | 0.2916 | 2.24E-06 | 4.73E-06 |
| cg05788638 | SERPINA10 | 14 | 93828773 | - - | No | 93829349 93829114 | 0.2913 | 2.09E-06 | 4.44E-06 |
| cg17108819 | CD8A | 2 | 86871464 | - | Yes | 86872348 | 0.2909 | 3.96E-06 | 7.90E-06 |
| cg05899618 | GDF7 | 2 | 20729328 | + | Yes | 20729904 | 0.2909 | 2.29E-06 | 4.81E-06 |
| cg05766474 | CCL16 | 17 | 31332781 | - | No | 31332636 | 0.2904 | 2.94E-06 | 6.09E-06 |
| cg14377593 | TFPI2 | 7 | 93358119 | - | Yes | 93358001 | 0.2895 | 2.58E-06 | 5.40E-06 |
| cg25084878 | FBN2 | 5 | 127901610 | - | Yes | 127901634 | 0.2893 | 2.71E-06 | 5.63E-06 |
| cg06781209 | FADS2 | 11 | 61351573 | + | Yes | 61352288 | 0.2889 | 3.84E-06 | 7.74E-06 |
| cg16994506 | CCND2 | 12 | 4253985 | + | Yes | 4253162 | 0.2886 | 3.68E-06 | 7.42E-06 |
| cg00465284 | LRRTM1 | 2 | 80385409 | - | No | 80384998 | 0.2885 | 2.62E-06 | 5.48E-06 |
| cg14323109 | KDR | 4 | 55686700 | - | Yes | 55686519 | 0.2884 | 3.14E-06 | 6.44E-06 |
| cg18063149 | FMO3 | 1 | 169326695 | + | No | 169326641 | 0.2882 | 2.92E-06 | 6.05E-06 |
| cg23642747 | INA | 10 | 105026635 | + | Yes | 105026909 | 0.2881 | 3.34E-06 | 6.79E-06 |
| cg15489294 | FLJ90650 | 5 | 115325752 | + | Yes | 115326049 | 0.2879 | 3.22E-06 | 6.58E-06 |
| cg15343119 | GALR1 | 18 | 73090773 | + | Yes | 73090995 | 0.2871 | 3.21E-06 | 6.58E-06 |
| cg06134964 | ITIH1 | 3 | 52787073 | + + + | No | 52786647 52787562 52788976 | 0.2865 | 3.33E-06 | 6.78E-06 |
| cg08977371 | CDH13 | 16 | 81217991 | + | No | 81218078 | 0.2862 | 3.12E-06 | 6.43E-06 |
| cg26252167 | GPR6 | 6 | 110407266 | + | Yes | 110406990 | 0.2856 | 3.12E-06 | 6.43E-06 |
| cg00333226 | UNQ739 | 7 | 49784309 | + | Yes | 49783802 | 0.2856 | 3.89E-06 | 7.77E-06 |
| cg05521696 | SLC2A14 | 12 | 7916762 | - | Yes | 7916762 | 0.2856 | 4.22E-06 | 8.28E-06 |
| cg02757432 | GPR26 | 10 | 125416038 | + | Yes | 125415860 | 0.2856 | 3.44E-06 | 6.97E-06 |
| cg20073553 | BAPX1 | 4 | 13154389 | - | Yes | 13155212 | 0.2851 | 4.42E-06 | 8.59E-06 |
| cg24019564 | RUNX3 | 1 | 25130153 | - | Yes | 25129357 | 0.2850 | 4.03E-06 | 8.00E-06 |
| cg23563234 | PCDHGB7 | 5 | 140777470 | + | Yes | 140777465 | 0.2849 | 3.88E-06 | 7.77E-06 |
| cg04062391 | ZNF560 | 19 | 9470204 | - | Yes | 9470279 | 0.2848 | 4.90E-06 | 9.44E-06 |
| cg27444994 | CDH8 | 16 | 60627573 | - | Yes | 60627537 | 0.2848 | 3.61E-06 | 7.31E-06 |
| cg10520887 | UNC5C | 4 | 96689117 | - | Yes | 96689185 | 0.2842 | 4.24E-06 | 8.28E-06 |
| cg04263186 | TACR3 | 4 | 104859938 | - | Yes | 104860422 | 0.2842 | 3.89E-06 | 7.77E-06 |
| cg12382902 | CCND2 | 12 | 4253960 | + | Yes | 4253162 | 0.2838 | 5.56E-06 | 1.06E-05 |
| cg23037403 | ZNF454 | 5 | 178300789 | + | Yes | 178300829 | 0.2836 | 4.56E-06 | 8.82E-06 |
| cg16042149 | NEFH | 22 | 28205947 | + | Yes | 28206180 | 0.2833 | 4.55E-06 | 8.82E-06 |
| cg27389185 | ZNF540 | 19 | 42733963 | + | No | 42734147 | 0.2832 | 3.99E-06 | 7.93E-06 |
| cg11547724 | HPX | 11 | 6419028 | - | No | 6418830 | 0.2830 | 4.24E-06 | 8.28E-06 |
| cg26316946 | GRIK2 | 6 | 101953688 | + | Yes | 101953581 | 0.2828 | 4.16E-06 | 8.20E-06 |
| cg25420952 | AMBP | 9 | 115880905 | - | No | 115880573 | 0.2827 | 4.23E-06 | 8.28E-06 |
| cg02245378 | FLJ32447 | 2 | 222870015 | + - | Yes | 222871109 222871944 | 0.2825 | 4.12E-06 | 8.14E-06 |
| cg14173523 | FUT5 | 19 | 5822035 | - | No | 5821551 | 0.2824 | 4.71E-06 | 9.09E-06 |
| cg20691580 | APOC3 | 11 | 116206254 | + | No | 116205833 | 0.2818 | 4.25E-06 | 8.29E-06 |
| cg00015770 | GPR103 | 4 | 122521457 | - | Yes | 122521631 | 0.2813 | 5.32E-06 | 1.02E-05 |
| cg13099330 | RBP1 | 3 | 140740489 | - | Yes | 140741361 | 0.2811 | 5.72E-06 | 1.08E-05 |
| cg13921352 | FAM19A4 | 3 | 69064580 | - | Yes | 69064401 | 0.2811 | 5.05E-06 | 9.68E-06 |
| cg16632715 | HOXD11 | 2 | 176680359 | + | Yes | 176680329 | 0.2809 | 5.02E-06 | 9.65E-06 |
| cg27319898 | FLJ32110 | 7 | 88226939 | + | Yes | 88226688 | 0.2806 | 6.03E-06 | 1.14E-05 |
| cg27016494 | DLX5 | 7 | 96489522 | NA | Yes | NA | 0.2805 | 5.51E-06 | 1.05E-05 |
| cg03614513 | TSPAN2 | 1 | 115433561 | - | Yes | 115433638 | 0.2804 | 9.05E-06 | 1.64E-05 |
| cg03544320 | CRMP1 | 4 | 5945592 | - | Yes | 5945686 | 0.2803 | 6.90E-06 | 1.27E-05 |

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|------------|------------|----|-----------|---------|-----|------------------------------|--------|----------|----------|
| cg06781209 | FADS2 | 11 | 61351573 | + | Yes | 61352288 | 0.2889 | 3.84E-06 | 7.74E-06 |
| cg16994506 | CCND2 | 12 | 4253985 | + | Yes | 4253162 | 0.2886 | 3.68E-06 | 7.42E-06 |
| cg00465284 | LRRTM1 | 2 | 80385409 | - | No | 80384998 | 0.2885 | 2.62E-06 | 5.48E-06 |
| cg14323109 | KDR | 4 | 55686700 | - | Yes | 55686519 | 0.2884 | 3.14E-06 | 6.44E-06 |
| cg18063149 | FMO3 | 1 | 169326695 | + | No | 169326641 | 0.2882 | 2.92E-06 | 6.05E-06 |
| cg23642747 | INA | 10 | 105026635 | + | Yes | 105026909 | 0.2881 | 3.34E-06 | 6.79E-06 |
| cg15489294 | FLJ90650 | 5 | 115325752 | + | Yes | 115326049 | 0.2879 | 3.22E-06 | 6.58E-06 |
| cg15343119 | GALR1 | 18 | 73090773 | + | Yes | 73090995 | 0.2871 | 3.21E-06 | 6.58E-06 |
| cg06134964 | ITIH1 | 3 | 52787073 | + + + | No | 52786647 52787562 52788976 | 0.2865 | 3.33E-06 | 6.78E-06 |
| cg08977371 | CDH13 | 16 | 81217991 | + | No | 81218078 | 0.2862 | 3.12E-06 | 6.43E-06 |
| cg26252167 | GPR6 | 6 | 110407266 | + | Yes | 110406990 | 0.2856 | 3.12E-06 | 6.43E-06 |
| cg00333226 | UNQ739 | 7 | 49784309 | + | Yes | 49783802 | 0.2856 | 3.89E-06 | 7.77E-06 |
| cg05521696 | SLC2A14 | 12 | 7916762 | - | Yes | 7916762 | 0.2856 | 4.22E-06 | 8.28E-06 |
| cg02757432 | GPR26 | 10 | 125416038 | + | Yes | 125415860 | 0.2856 | 3.44E-06 | 6.97E-06 |
| cg20073553 | BAPX1 | 4 | 13154389 | - | Yes | 13155212 | 0.2851 | 4.42E-06 | 8.59E-06 |
| cg24019564 | RUNX3 | 1 | 25130153 | - | Yes | 25129357 | 0.2850 | 4.03E-06 | 8.00E-06 |
| cg23563234 | PCDHGB7 | 5 | 140777470 | + | Yes | 140777465 | 0.2849 | 3.88E-06 | 7.77E-06 |
| cg04062391 | ZNF560 | 19 | 9470204 | - | Yes | 9470279 | 0.2848 | 4.90E-06 | 9.44E-06 |
| cg27444994 | CDH8 | 16 | 60627573 | - | Yes | 60627537 | 0.2848 | 3.61E-06 | 7.31E-06 |
| cg10520887 | UNC5C | 4 | 96689117 | - | Yes | 96689185 | 0.2842 | 4.24E-06 | 8.28E-06 |
| cg04263186 | TACR3 | 4 | 104859938 | - | Yes | 104860422 | 0.2842 | 3.89E-06 | 7.77E-06 |
| cg12382902 | CCND2 | 12 | 4253960 | + | Yes | 4253162 | 0.2838 | 5.56E-06 | 1.06E-05 |
| cg23037403 | ZNF454 | 5 | 178300789 | + | Yes | 178300829 | 0.2836 | 4.56E-06 | 8.82E-06 |
| cg16042149 | NEFH | 22 | 28205947 | + | Yes | 28206180 | 0.2833 | 4.55E-06 | 8.82E-06 |
| cg27389185 | ZNF540 | 19 | 42733963 | + | No | 42734147 | 0.2832 | 3.99E-06 | 7.93E-06 |
| cg11547724 | HPX | 11 | 6419028 | - | No | 6418830 | 0.2830 | 4.24E-06 | 8.28E-06 |
| cg26316946 | GRIK2 | 6 | 101953688 | + | Yes | 101953581 | 0.2828 | 4.16E-06 | 8.20E-06 |
| cg25420952 | AMBP | 9 | 115880905 | - | No | 115880573 | 0.2827 | 4.23E-06 | 8.28E-06 |
| cg02245378 | FLJ32447 | 2 | 222870015 | + - | Yes | 222871109 222871944 | 0.2825 | 4.12E-06 | 8.14E-06 |
| cg14173523 | FUT5 | 19 | 5822035 | - | No | 5821551 | 0.2824 | 4.71E-06 | 9.09E-06 |
| cg20691580 | APOC3 | 11 | 116206254 | + | No | 116205833 | 0.2818 | 4.25E-06 | 8.29E-06 |
| cg00015770 | GPR103 | 4 | 122521457 | - | Yes | 122521631 | 0.2813 | 5.32E-06 | 1.02E-05 |
| cg13099330 | RBP1 | 3 | 140740489 | - | Yes | 140741361 | 0.2811 | 5.72E-06 | 1.08E-05 |
| cg13921352 | FAM19A4 | 3 | 69064580 | - | Yes | 69064401 | 0.2811 | 5.05E-06 | 9.68E-06 |
| cg16632715 | HOXD11 | 2 | 176680359 | + | Yes | 176680329 | 0.2809 | 5.02E-06 | 9.65E-06 |
| cg27319898 | FLJ32110 | 7 | 88226939 | + | Yes | 88226688 | 0.2806 | 6.03E-06 | 1.14E-05 |
| cg27016494 | DLX5 | 7 | 96489522 | NA | Yes | NA | 0.2805 | 5.51E-06 | 1.05E-05 |
| cg03614513 | TSPAN2 | 1 | 115433561 | - | Yes | 115433638 | 0.2804 | 9.05E-06 | 1.64E-05 |
| cg03544320 | CRMP1 | 4 | 5945592 | - | Yes | 5945686 | 0.2803 | 6.90E-06 | 1.27E-05 |
| cg05633152 | SLC10A1 | 14 | 69333564 | - | No | 69333759 | 0.2793 | 6.11E-06 | 1.15E-05 |
| cg13823136 | ST6GALNAC5 | 1 | 77105726 | + | Yes | 77105773 | 0.2791 | 5.65E-06 | 1.07E-05 |
| cg17389519 | PTF1A | 10 | 23520736 | + | Yes | 23521465 | 0.2788 | 6.03E-06 | 1.14E-05 |
| cg15202954 | VGCNL1 | 13 | 100866997 | - | Yes | 100866814 | 0.2783 | 8.37E-06 | 1.53E-05 |
| cg22498251 | TWIST1 | 7 | 19124235 | - | Yes | 19123820 | 0.2783 | 5.60E-06 | 1.06E-05 |
| cg18750960 | HOXD4 | 2 | 176724663 | + + | Yes | 176724358 176723276 | 0.2781 | 6.65E-06 | 1.23E-05 |
| cg03355526 | ZNF454 | 5 | 178301021 | + | Yes | 178300829 | 0.2778 | 6.23E-06 | 1.16E-05 |
| cg24723331 | ST8SIA1 | 12 | 22378486 | - | Yes | 22378915 | 0.2778 | 6.55E-06 | 1.22E-05 |
| cg20774846 | DPYS | 8 | 105548596 | - | Yes | 105548453 | 0.2774 | 8.27E-06 | 1.52E-05 |
| cg25162301 | AHSG | 3 | 187812749 | + | No | 187813543 | 0.2773 | 6.46E-06 | 1.20E-05 |
| cg21958034 | MST1 | 3 | 49700844 | + - | No | 49701993 49701200 | 0.2773 | 6.22E-06 | 1.16E-05 |
| cg18878432 | HOXB6 | 17 | 44038408 | - | No | 44037333 | 0.2768 | 6.66E-06 | 1.23E-05 |
| cg03064067 | SLC6A15 | 12 | 83831047 | - | Yes | 83830737 | 0.2762 | 6.43E-06 | 1.20E-05 |
| cg18221862 | TMEFF2 | 2 | 192767475 | - | Yes | 192767889 | 0.2760 | 7.82E-06 | 1.44E-05 |
| cg21660392 | ABCA8 | 17 | 64462140 | - | No | 64463128 | 0.2738 | 8.41E-06 | 1.53E-05 |
| cg21233722 | DOCK2 | 5 | 168997238 | + | Yes | 168996828 | 0.2737 | 1.03E-05 | 1.84E-05 |
| cg26099316 | ITIH3 | 3 | 52803834 | + | No | 52803823 | 0.2736 | 8.54E-06 | 1.55E-05 |
| cg06722216 | NOL4 | 18 | 30057065 | - | Yes | 30057444 | 0.2735 | 8.76E-06 | 1.59E-05 |
| cg26851374 | C8B | 1 | 57204738 | - | No | 57204276 | 0.2732 | 8.35E-06 | 1.53E-05 |
| cg20988616 | ENPP3 | 6 | 131999837 | + | No | 132000134 | 0.2729 | 9.30E-06 | 1.68E-05 |
| cg18972811 | SLIT2 | 4 | 19863834 | + | Yes | 19864332 | 0.2729 | 1.08E-05 | 1.91E-05 |
| cg12351433 | LHCGR | 2 | 48836461 | - | Yes | 48836384 | 0.2726 | 1.20E-05 | 2.11E-05 |
| cg09186006 | SLC16A12 | 10 | 91285279 | - | Yes | 91285293 | 0.2725 | 1.55E-05 | 2.66E-05 |
| cg15852891 | OTP | 5 | 76970702 | - | Yes | 76970278 | 0.2725 | 9.43E-06 | 1.69E-05 |
| cg08432727 | SOX11 | 2 | 5749173 | + | No | 5750249 | 0.2721 | 9.32E-06 | 1.68E-05 |
| cg21460081 | HOXB4 | 17 | 44011011 | - - | No | 44010742 44012308 | 0.2720 | 1.01E-05 | 1.81E-05 |
| cg16408565 | ORM2 | 9 | 116130745 | + | No | 116131889 | 0.2718 | 1.07E-05 | 1.91E-05 |

| | | | | | | | | | |
|------------|------------|----|-----------|------|-----|----------------------|--------|----------|----------|
| cg00333226 | UNC739 | 7 | 49784309 | + | Yes | 49783802 | 0.2836 | 3.89E-06 | 7.77E-06 |
| cg05521696 | SLC2A14 | 12 | 7916762 | - | Yes | 7916762 | 0.2856 | 4.22E-06 | 8.28E-06 |
| cg02757432 | GPR26 | 10 | 125416038 | + | Yes | 125415860 | 0.2856 | 3.44E-06 | 6.97E-06 |
| cg20073553 | BAPX1 | 4 | 13154389 | - | Yes | 13155212 | 0.2851 | 4.42E-06 | 8.59E-06 |
| cg24019564 | RUNX3 | 1 | 25130153 | - | Yes | 25129357 | 0.2850 | 4.03E-06 | 8.00E-06 |
| cg23563234 | PCDHGB7 | 5 | 140777470 | + | Yes | 140777465 | 0.2849 | 3.88E-06 | 7.77E-06 |
| cg04062391 | ZNF560 | 19 | 9470204 | - | Yes | 9470279 | 0.2848 | 4.90E-06 | 9.44E-06 |
| cg27444994 | CDH8 | 16 | 60627573 | - | Yes | 60627537 | 0.2848 | 3.61E-06 | 7.31E-06 |
| cg10520887 | UNC5C | 4 | 96689117 | - | Yes | 96689185 | 0.2842 | 4.24E-06 | 8.28E-06 |
| cg04263186 | TACR3 | 4 | 104859938 | - | Yes | 104860422 | 0.2842 | 3.89E-06 | 7.77E-06 |
| cg12382902 | CCND2 | 12 | 4253960 | + | Yes | 4253162 | 0.2838 | 5.56E-06 | 1.06E-05 |
| cg23037403 | ZNF454 | 5 | 178300789 | + | Yes | 178300829 | 0.2836 | 4.56E-06 | 8.82E-06 |
| cg16042149 | NEFH | 22 | 28205947 | + | Yes | 28206180 | 0.2833 | 4.55E-06 | 8.82E-06 |
| cg27389185 | ZNF540 | 19 | 42733963 | + | No | 42734147 | 0.2832 | 3.99E-06 | 7.93E-06 |
| cg11547724 | HPX | 11 | 6419028 | - | No | 6418830 | 0.2830 | 4.24E-06 | 8.28E-06 |
| cg26316946 | GRIK2 | 6 | 101953688 | + | Yes | 101953581 | 0.2828 | 4.16E-06 | 8.20E-06 |
| cg25420952 | AMBP | 9 | 115880905 | - | No | 115880573 | 0.2827 | 4.23E-06 | 8.28E-06 |
| cg02245378 | FLJ32447 | 2 | 222870015 | + - | Yes | 222871109 222871944 | 0.2825 | 4.12E-06 | 8.14E-06 |
| cg14173523 | FUT5 | 19 | 5822035 | - | No | 5821551 | 0.2824 | 4.71E-06 | 9.09E-06 |
| cg20691580 | APOC3 | 11 | 116206254 | + | No | 116205833 | 0.2818 | 4.25E-06 | 8.29E-06 |
| cg00015770 | GPR103 | 4 | 122521457 | - | Yes | 122521631 | 0.2813 | 5.32E-06 | 1.02E-05 |
| cg13099330 | RBP1 | 3 | 140740489 | - | Yes | 140741361 | 0.2811 | 5.72E-06 | 1.08E-05 |
| cg13921352 | FAM19A4 | 3 | 69064580 | - | Yes | 69064401 | 0.2811 | 5.05E-06 | 9.68E-06 |
| cg16632715 | HOXD11 | 2 | 176680359 | + | Yes | 176680329 | 0.2809 | 5.02E-06 | 9.65E-06 |
| cg27319898 | FLJ32110 | 7 | 88226939 | + | Yes | 88226688 | 0.2806 | 6.03E-06 | 1.14E-05 |
| cg27016494 | DLX5 | 7 | 96489522 | NA | Yes | NA | 0.2805 | 5.51E-06 | 1.05E-05 |
| cg03614513 | TSPAN2 | 1 | 115433561 | - | Yes | 115433638 | 0.2804 | 9.05E-06 | 1.64E-05 |
| cg03544320 | CRMP1 | 4 | 5945592 | - | Yes | 5945686 | 0.2803 | 6.90E-06 | 1.27E-05 |
| cg05633152 | SLC10A1 | 14 | 69333564 | - | No | 69333759 | 0.2793 | 6.11E-06 | 1.15E-05 |
| cg13823136 | ST6GALNAC5 | 1 | 77105726 | + | Yes | 77105773 | 0.2791 | 5.65E-06 | 1.07E-05 |
| cg17389519 | PTF1A | 10 | 23520736 | + | Yes | 23521465 | 0.2788 | 6.03E-06 | 1.14E-05 |
| cg15202954 | VGCNL1 | 13 | 100866997 | - | Yes | 100866814 | 0.2783 | 8.37E-06 | 1.53E-05 |
| cg22498251 | TWIST1 | 7 | 19124235 | - | Yes | 19123820 | 0.2783 | 5.60E-06 | 1.06E-05 |
| cg18750960 | HOXD4 | 2 | 176724663 | + + | Yes | 176724358 176723276 | 0.2781 | 6.65E-06 | 1.23E-05 |
| cg03355526 | ZNF454 | 5 | 178301021 | + | Yes | 178300829 | 0.2778 | 6.23E-06 | 1.16E-05 |
| cg24723331 | ST8SIA1 | 12 | 22378486 | - | Yes | 22378915 | 0.2778 | 6.55E-06 | 1.22E-05 |
| cg20774846 | DPYS | 8 | 105548596 | - | Yes | 105548453 | 0.2774 | 8.27E-06 | 1.52E-05 |
| cg25162301 | AHSG | 3 | 187812749 | + | No | 187813543 | 0.2773 | 6.46E-06 | 1.20E-05 |
| cg21958034 | MST1 | 3 | 49700844 | + - | No | 49701993 49701200 | 0.2773 | 6.22E-06 | 1.16E-05 |
| cg18878432 | HOXB6 | 17 | 44038408 | - | No | 44037333 | 0.2768 | 6.66E-06 | 1.23E-05 |
| cg03064067 | SLC6A15 | 12 | 83831047 | - | Yes | 83830737 | 0.2762 | 6.43E-06 | 1.20E-05 |
| cg18221862 | TMEFF2 | 2 | 192767475 | - | Yes | 192767889 | 0.2760 | 7.82E-06 | 1.44E-05 |
| cg21660392 | ABCA8 | 17 | 64462140 | - | No | 64463128 | 0.2738 | 8.41E-06 | 1.53E-05 |
| cg21233722 | DOCK2 | 5 | 168997238 | + | Yes | 168996828 | 0.2737 | 1.03E-05 | 1.84E-05 |
| cg26099316 | ITIH3 | 3 | 52803834 | + | No | 52803823 | 0.2736 | 8.54E-06 | 1.55E-05 |
| cg06722216 | NOL4 | 18 | 30057065 | - | Yes | 30057444 | 0.2735 | 8.76E-06 | 1.59E-05 |
| cg26851374 | C8B | 1 | 57204738 | - | No | 57204276 | 0.2732 | 8.35E-06 | 1.53E-05 |
| cg20988616 | ENPP3 | 6 | 131999837 | + | No | 132000134 | 0.2729 | 9.30E-06 | 1.68E-05 |
| cg18972811 | SLIT2 | 4 | 19863834 | + | Yes | 19864332 | 0.2729 | 1.08E-05 | 1.91E-05 |
| cg12351433 | LHCGR | 2 | 48836461 | - | Yes | 48836384 | 0.2726 | 1.20E-05 | 2.11E-05 |
| cg09186006 | SLC16A12 | 10 | 91285279 | - | Yes | 91285293 | 0.2725 | 1.55E-05 | 2.66E-05 |
| cg15852891 | OTP | 5 | 76970702 | - | Yes | 76970278 | 0.2725 | 9.43E-06 | 1.69E-05 |
| cg08432727 | SOX11 | 2 | 5749173 | + | No | 5750249 | 0.2721 | 9.32E-06 | 1.68E-05 |
| cg21460081 | HOXB4 | 17 | 44011011 | - - | No | 44010742 44012308 | 0.2720 | 1.01E-05 | 1.81E-05 |
| cg16408565 | ORM2 | 9 | 116130745 | + | No | 116131889 | 0.2718 | 1.07E-05 | 1.91E-05 |
| cg17803430 | C4BPA | 1 | 205344947 | + | No | 205344229 | 0.2717 | 1.01E-05 | 1.81E-05 |
| cg06856528 | TMEFF2 | 2 | 192767650 | - | Yes | 192767889 | 0.2715 | 1.16E-05 | 2.04E-05 |
| cg20209009 | TBX21 | 17 | 43166321 | + | Yes | 43165608 | 0.2712 | 1.21E-05 | 2.13E-05 |
| cg14165663 | GALR2 | 17 | 71581864 | + - | Yes | 71582486 71580202 | 0.2709 | 9.60E-06 | 1.72E-05 |
| cg11847949 | CYP21A2 | 6 | 32114000 | + | No | 32114060 | 0.2707 | 1.09E-05 | 1.92E-05 |
| cg00371195 | F2 | 11 | 46697057 | + | No | 46697318 | 0.2696 | 1.13E-05 | 2.00E-05 |
| cg14882700 | OTOP1 | 4 | 4279472 | - | Yes | 4279522 | 0.2683 | 1.25E-05 | 2.19E-05 |
| cg13265789 | UNC5C | 4 | 96689607 | - | Yes | 96689185 | 0.2682 | 1.30E-05 | 2.27E-05 |
| cg15446391 | WT1 | 11 | 32408946 | - | Yes | 32408935 | 0.2680 | 1.22E-05 | 2.13E-05 |
| cg21210758 | EVC | 4 | 5763906 | + - | Yes | 57638241 5762176 | 0.2678 | 2.21E-05 | 3.65E-05 |

| | | | | | | | | | |
|------------|------------|----|-----------|------|-----|-----------------------|--------|----------|----------|
| cg24019564 | RUNX3 | 1 | 25130153 | - | Yes | 25129357 | 0.2850 | 4.03E-06 | 8.00E-06 |
| cg23563234 | PCDHGB7 | 5 | 140777470 | + | Yes | 140777465 | 0.2849 | 3.88E-06 | 7.77E-06 |
| cg04062391 | ZNF560 | 19 | 9470204 | - | Yes | 9470279 | 0.2848 | 4.90E-06 | 9.44E-06 |
| cg27444994 | CDH8 | 16 | 60627573 | - | Yes | 60627537 | 0.2848 | 3.61E-06 | 7.31E-06 |
| cg10520887 | UNC5C | 4 | 96689117 | - | Yes | 96689185 | 0.2842 | 4.24E-06 | 8.28E-06 |
| cg04263186 | TACR3 | 4 | 104859938 | - | Yes | 104860422 | 0.2842 | 3.89E-06 | 7.77E-06 |
| cg12382902 | CCND2 | 12 | 4253960 | + | Yes | 4253162 | 0.2838 | 5.56E-06 | 1.06E-05 |
| cg23037403 | ZNF454 | 5 | 178300789 | + | Yes | 178300829 | 0.2836 | 4.56E-06 | 8.82E-06 |
| cg16042149 | NEFH | 22 | 28205947 | + | Yes | 28206180 | 0.2833 | 4.55E-06 | 8.82E-06 |
| cg27389185 | ZNF540 | 19 | 42733963 | + | No | 42734147 | 0.2832 | 3.99E-06 | 7.93E-06 |
| cg11547724 | HPX | 11 | 6419028 | - | No | 6418830 | 0.2830 | 4.24E-06 | 8.28E-06 |
| cg26316946 | GRIK2 | 6 | 101953688 | + | Yes | 101953581 | 0.2828 | 4.16E-06 | 8.20E-06 |
| cg25420952 | AMBP | 9 | 115880905 | - | No | 115880573 | 0.2827 | 4.23E-06 | 8.28E-06 |
| cg02245378 | FLJ32447 | 2 | 222870015 | + - | Yes | 222871109 222871944 | 0.2825 | 4.12E-06 | 8.14E-06 |
| cg14173523 | FUT5 | 19 | 5822035 | - | No | 5821551 | 0.2824 | 4.71E-06 | 9.09E-06 |
| cg20691580 | APOC3 | 11 | 116206254 | + | No | 116205833 | 0.2818 | 4.25E-06 | 8.29E-06 |
| cg00015770 | GPR103 | 4 | 122521457 | - | Yes | 122521631 | 0.2813 | 5.32E-06 | 1.02E-05 |
| cg13099330 | RBP1 | 3 | 140740489 | - | Yes | 140741361 | 0.2811 | 5.72E-06 | 1.08E-05 |
| cg13921352 | FAM19A4 | 3 | 69064580 | - | Yes | 69064401 | 0.2811 | 5.05E-06 | 9.68E-06 |
| cg16632715 | HOXD11 | 2 | 176680359 | + | Yes | 176680329 | 0.2809 | 5.02E-06 | 9.65E-06 |
| cg27319898 | FLJ32110 | 7 | 88226939 | + | Yes | 88226688 | 0.2806 | 6.03E-06 | 1.14E-05 |
| cg27016494 | DLX5 | 7 | 96489522 | NA | Yes | NA | 0.2805 | 5.51E-06 | 1.05E-05 |
| cg03614513 | TSPAN2 | 1 | 115433561 | - | Yes | 115433638 | 0.2804 | 9.05E-06 | 1.64E-05 |
| cg03544320 | CRMP1 | 4 | 5945592 | - | Yes | 5945686 | 0.2803 | 6.90E-06 | 1.27E-05 |
| cg05633152 | SLC10A1 | 14 | 69333564 | - | No | 69333759 | 0.2793 | 6.11E-06 | 1.15E-05 |
| cg13823136 | ST6GALNAC5 | 1 | 77105726 | + | Yes | 77105773 | 0.2791 | 5.65E-06 | 1.07E-05 |
| cg17389519 | PTF1A | 10 | 23520736 | + | Yes | 23521465 | 0.2788 | 6.03E-06 | 1.14E-05 |
| cg15202954 | VGCNL1 | 13 | 100866997 | - | Yes | 100866814 | 0.2783 | 8.37E-06 | 1.53E-05 |
| cg22498251 | TWIST1 | 7 | 19124235 | - | Yes | 19123820 | 0.2783 | 5.60E-06 | 1.06E-05 |
| cg18750960 | HOXD4 | 2 | 176724663 | + + | Yes | 176724358 176723276 | 0.2781 | 6.65E-06 | 1.23E-05 |
| cg03355526 | ZNF454 | 5 | 178301021 | + | Yes | 178300829 | 0.2778 | 6.23E-06 | 1.16E-05 |
| cg24723331 | ST8SIA1 | 12 | 22378486 | - | Yes | 22378915 | 0.2778 | 6.55E-06 | 1.22E-05 |
| cg20774846 | DPYS | 8 | 105548596 | - | Yes | 105548453 | 0.2774 | 8.27E-06 | 1.52E-05 |
| cg25162301 | AHSG | 3 | 187812749 | + | No | 187813543 | 0.2773 | 6.46E-06 | 1.20E-05 |
| cg21958034 | MST1 | 3 | 49700844 | + - | No | 49701993 49701200 | 0.2773 | 6.22E-06 | 1.16E-05 |
| cg18878432 | HOXB6 | 17 | 44038408 | - | No | 44037333 | 0.2768 | 6.66E-06 | 1.23E-05 |
| cg03064067 | SLC6A15 | 12 | 83831047 | - | Yes | 83830737 | 0.2762 | 6.43E-06 | 1.20E-05 |
| cg18221862 | TMEFF2 | 2 | 192767475 | - | Yes | 192767889 | 0.2760 | 7.82E-06 | 1.44E-05 |
| cg21660392 | ABCA8 | 17 | 64462140 | - | No | 64463128 | 0.2738 | 8.41E-06 | 1.53E-05 |
| cg21233722 | DOCK2 | 5 | 168997238 | + | Yes | 168996828 | 0.2737 | 1.03E-05 | 1.84E-05 |
| cg26099316 | ITIH3 | 3 | 52803834 | + | No | 52803823 | 0.2736 | 8.54E-06 | 1.55E-05 |
| cg06722216 | NOL4 | 18 | 30057065 | - | Yes | 30057444 | 0.2735 | 8.76E-06 | 1.59E-05 |
| cg26851374 | C8B | 1 | 57204738 | - | No | 57204276 | 0.2732 | 8.35E-06 | 1.53E-05 |
| cg20988616 | ENPP3 | 6 | 131999837 | + | No | 132000134 | 0.2729 | 9.30E-06 | 1.68E-05 |
| cg18972811 | SLIT2 | 4 | 19863834 | + | Yes | 19864332 | 0.2729 | 1.08E-05 | 1.91E-05 |
| cg12351433 | LHCGR | 2 | 48836461 | - | Yes | 48836384 | 0.2726 | 1.20E-05 | 2.11E-05 |
| cg09186006 | SLC16A12 | 10 | 91285279 | - | Yes | 91285293 | 0.2725 | 1.55E-05 | 2.66E-05 |
| cg15852891 | OTP | 5 | 76970702 | - | Yes | 76970278 | 0.2725 | 9.43E-06 | 1.69E-05 |
| cg08432727 | SOX11 | 2 | 5749173 | + | No | 5750249 | 0.2721 | 9.32E-06 | 1.68E-05 |
| cg21460081 | HOXB4 | 17 | 44011011 | - - | No | 44010742 44012308 | 0.2720 | 1.01E-05 | 1.81E-05 |
| cg16408565 | ORM2 | 9 | 116130745 | + | No | 116131889 | 0.2718 | 1.07E-05 | 1.91E-05 |
| cg17803430 | C4BPA | 1 | 205344947 | + | No | 205344229 | 0.2717 | 1.01E-05 | 1.81E-05 |
| cg06856528 | TMEFF2 | 2 | 192767650 | - | Yes | 192767889 | 0.2715 | 1.16E-05 | 2.04E-05 |
| cg20209009 | TBX21 | 17 | 43166321 | + | Yes | 43165608 | 0.2712 | 1.21E-05 | 2.13E-05 |
| cg14165663 | GALR2 | 17 | 71581864 | + - | Yes | 71582486 71580202 | 0.2709 | 9.60E-06 | 1.72E-05 |
| cg11847949 | CYP21A2 | 6 | 32114000 | + | No | 32114060 | 0.2707 | 1.09E-05 | 1.92E-05 |
| cg00371195 | F2 | 11 | 46697057 | + | No | 46697318 | 0.2696 | 1.13E-05 | 2.00E-05 |
| cg14882700 | OTOP1 | 4 | 4279472 | - | Yes | 4279522 | 0.2683 | 1.25E-05 | 2.19E-05 |
| cg13265789 | UNC5C | 4 | 96689607 | - | Yes | 96689185 | 0.2682 | 1.30E-05 | 2.27E-05 |
| cg15446391 | WT1 | 11 | 32408946 | - | Yes | 32408935 | 0.2680 | 1.22E-05 | 2.13E-05 |
| cg21210758 | EVC | 4 | 5763906 | + - | Yes | 5763824 5762176 | 0.2678 | 2.21E-05 | 3.65E-05 |
| cg02217159 | KHDRBS2 | 6 | 63054656 | - | No | 63054059 | 0.2673 | 1.48E-05 | 2.55E-05 |
| cg21409833 | ANGPTL3 | 1 | 62835312 | + | No | 62835774 | 0.2669 | 1.38E-05 | 2.39E-05 |
| cg25563456 | WT1 | 11 | 32412645 | + - | Yes | 32413860 32413663 | 0.2667 | 1.70E-05 | 2.88E-05 |
| cg04128452 | FLJ20581 | 16 | 20228152 | + | No | 20228256 | 0.2662 | 1.22E-05 | 2.22E-05 |

| | | | | | | | | | |
|------------|-----------|----|-----------|------|-----|----------------------|--------|----------|----------|
| cg03355526 | ZNF454 | 5 | 178301021 | + | Yes | 178300829 | 0.2778 | 6.23E-06 | 1.16E-05 |
| cg24723331 | ST8SIA1 | 12 | 22378486 | - | Yes | 22378915 | 0.2778 | 6.55E-06 | 1.22E-05 |
| cg20774846 | DPYS | 8 | 105548596 | - | Yes | 105548453 | 0.2774 | 8.27E-06 | 1.52E-05 |
| cg25162301 | AHSG | 3 | 187812749 | + | No | 187813543 | 0.2773 | 6.46E-06 | 1.20E-05 |
| cg21958034 | MST1 | 3 | 49700844 | + - | No | 49701993 49701200 | 0.2773 | 6.22E-06 | 1.16E-05 |
| cg18878432 | HOXB6 | 17 | 44038408 | - | No | 44037333 | 0.2768 | 6.66E-06 | 1.23E-05 |
| cg03064067 | SLC6A15 | 12 | 83831047 | - | Yes | 83830737 | 0.2762 | 6.43E-06 | 1.20E-05 |
| cg18221862 | TMEFF2 | 2 | 192767475 | - | Yes | 192767889 | 0.2760 | 7.82E-06 | 1.44E-05 |
| cg21660392 | ABCA8 | 17 | 64462140 | - | No | 64463128 | 0.2738 | 8.41E-06 | 1.53E-05 |
| cg21233722 | DOCK2 | 5 | 168997238 | + | Yes | 168996828 | 0.2737 | 1.03E-05 | 1.84E-05 |
| cg26099316 | ITIH3 | 3 | 52803834 | + | No | 52803823 | 0.2736 | 8.54E-06 | 1.55E-05 |
| cg06722216 | NOL4 | 18 | 30057065 | - | Yes | 30057444 | 0.2735 | 8.76E-06 | 1.59E-05 |
| cg26851374 | C8B | 1 | 57204738 | - | No | 57204276 | 0.2732 | 8.35E-06 | 1.53E-05 |
| cg20988616 | ENPP3 | 6 | 131999837 | + | No | 132000134 | 0.2729 | 9.30E-06 | 1.68E-05 |
| cg18972811 | SLIT2 | 4 | 19863834 | + | Yes | 19864332 | 0.2729 | 1.08E-05 | 1.91E-05 |
| cg12351433 | LHCGR | 2 | 48836461 | - | Yes | 48836384 | 0.2726 | 1.20E-05 | 2.11E-05 |
| cg09186006 | SLC16A12 | 10 | 91285279 | - | Yes | 91285293 | 0.2725 | 1.55E-05 | 2.66E-05 |
| cg15852891 | OTP | 5 | 76970702 | - | Yes | 76970278 | 0.2725 | 9.43E-06 | 1.69E-05 |
| cg08432727 | SOX11 | 2 | 5749173 | + | No | 5750249 | 0.2721 | 9.32E-06 | 1.68E-05 |
| cg21460081 | HOXB4 | 17 | 44011011 | - - | No | 44010742 44012308 | 0.2720 | 1.01E-05 | 1.81E-05 |
| cg16408565 | ORM2 | 9 | 116130745 | + | No | 116131889 | 0.2718 | 1.07E-05 | 1.91E-05 |
| cg17803430 | C4BPA | 1 | 205344947 | + | No | 205344229 | 0.2717 | 1.01E-05 | 1.81E-05 |
| cg06856528 | TMEFF2 | 2 | 192767650 | - | Yes | 192767889 | 0.2715 | 1.16E-05 | 2.04E-05 |
| cg20209009 | TBX21 | 17 | 43166321 | + | Yes | 43165608 | 0.2712 | 1.21E-05 | 2.13E-05 |
| cg14165663 | GALR2 | 17 | 71581864 | + - | Yes | 71582486 71580202 | 0.2709 | 9.60E-06 | 1.72E-05 |
| cg11847949 | CYP21A2 | 6 | 32114000 | + | No | 32114060 | 0.2707 | 1.09E-05 | 1.92E-05 |
| cg00371195 | F2 | 11 | 46697057 | + | No | 46697318 | 0.2696 | 1.13E-05 | 2.00E-05 |
| cg14882700 | OTOP1 | 4 | 4279472 | - | Yes | 4279522 | 0.2683 | 1.25E-05 | 2.19E-05 |
| cg13265789 | UNC5C | 4 | 96689607 | - | Yes | 96689185 | 0.2682 | 1.30E-05 | 2.27E-05 |
| cg15446391 | WT1 | 11 | 32408946 | - | Yes | 32408935 | 0.2680 | 1.22E-05 | 2.13E-05 |
| cg21210758 | EVC | 4 | 5763906 | + - | Yes | 5763824 5762176 | 0.2678 | 2.21E-05 | 3.65E-05 |
| cg02217159 | KHDRBS2 | 6 | 63054656 | - | No | 63054059 | 0.2673 | 1.48E-05 | 2.55E-05 |
| cg21409833 | ANGPTL3 | 1 | 62835312 | + | No | 62835774 | 0.2669 | 1.38E-05 | 2.39E-05 |
| cg25563456 | WT1 | 11 | 32412645 | + - | Yes | 32413860 32413663 | 0.2667 | 1.70E-05 | 2.88E-05 |
| cg04428453 | FLJ20581 | 16 | 20328153 | + | No | 20328356 | 0.2663 | 1.33E-05 | 2.32E-05 |
| cg05389335 | TACR3 | 4 | 104860768 | - | No | 104860422 | 0.2661 | 1.66E-05 | 2.83E-05 |
| cg09936561 | DRD5 | 4 | 9392721 | + | Yes | 9392355 | 0.2661 | 1.48E-05 | 2.56E-05 |
| cg06186808 | LOC161247 | 14 | 23670741 | + | No | 23670514 | 0.2659 | 1.54E-05 | 2.65E-05 |
| cg02844545 | GCM2 | 6 | 10990029 | - | Yes | 10990084 | 0.2658 | 1.56E-05 | 2.68E-05 |
| cg18876189 | FGB | 4 | 155702533 | + | No | 155703581 | 0.2658 | 1.42E-05 | 2.46E-05 |
| cg07730329 | PCDHGA12 | 5 | 140790321 | + | No | 140790341 | 0.2650 | 1.75E-05 | 2.96E-05 |
| cg01410472 | CRISPLD1 | 8 | 76059530 | + | Yes | 76059397 | 0.2647 | 1.93E-05 | 3.25E-05 |
| cg24169822 | HOXA4 | 7 | 27137519 | - | No | 27136924 | 0.2642 | 1.64E-05 | 2.81E-05 |
| cg06821993 | CSMD3 | 8 | 114518187 | - | No | 114518418 | 0.2641 | 1.67E-05 | 2.85E-05 |
| cg10486998 | GALR1 | 18 | 73090775 | + | Yes | 73090995 | 0.2640 | 1.75E-05 | 2.96E-05 |
| cg11260848 | ALX4 | 11 | 44282836 | NA | Yes | NA | 0.2626 | 1.89E-05 | 3.19E-05 |
| cg11935147 | PDE4DIP | 1 | 143787188 | - | Yes | 143787436 | 0.2620 | 2.06E-05 | 3.43E-05 |
| cg24507762 | KCNB1 | 20 | 47533297 | - | No | 47532588 | 0.2620 | 2.03E-05 | 3.39E-05 |
| cg26181372 | ALDOB | 9 | 103238083 | - | No | 103237883 | 0.2618 | 2.00E-05 | 3.35E-05 |
| cg19282250 | KIAA0367 | 9 | 78518342 | NA | No | NA | 0.2617 | 1.86E-05 | 3.14E-05 |
| cg10356463 | ITIH1 | 3 | 52786416 | + + | No | 52786647 52787562 | 0.2617 | 2.20E-05 | 3.65E-05 |
| cg16415058 | SORCS1 | 10 | 108913771 | - | Yes | 108914282 | 0.2617 | 2.24E-05 | 3.69E-05 |
| cg12781568 | WT1 | 11 | 32408614 | - | Yes | 32408935 | 0.2616 | 1.89E-05 | 3.18E-05 |
| cg24552358 | ORM1 | 9 | 116125879 | + | No | 116125123 | 0.2609 | 2.12E-05 | 3.51E-05 |
| cg04508649 | ANGPTL7 | 1 | 11171633 | + | No | 11171984 | 0.2608 | 2.05E-05 | 3.41E-05 |
| cg11469778 | ARHGEF4 | 2 | 131390671 | + | Yes | 131390693 | 0.2605 | 2.46E-05 | 4.06E-05 |
| cg16937611 | SERPINA5 | 14 | 94117855 | + | No | 94117483 | 0.2594 | 2.62E-05 | 4.29E-05 |
| cg12128839 | HOXA5 | 7 | 27149961 | - | Yes | 27149812 | 0.2590 | 2.52E-05 | 4.14E-05 |
| cg08896945 | CALCB | 11 | 15051644 | + | Yes | 15051721 | 0.2587 | 2.95E-05 | 4.78E-05 |
| cg27420236 | RPRM | 2 | 154042962 | - | Yes | 154043568 | 0.2584 | 2.76E-05 | 4.51E-05 |
| cg12127282 | HOXD4 | 2 | 176722931 | + + | No | 176724358 176723276 | 0.2583 | 2.90E-05 | 4.71E-05 |
| cg12680609 | ZFP41 | 8 | 144399875 | + | Yes | 144400483 | 0.2577 | 3.11E-05 | 5.00E-05 |
| cg16501028 | WT1 | 11 | 32406576 | NA | No | NA | 0.2576 | 2.53E-05 | 4.15E-05 |
| cg11319389 | C20orf100 | 20 | 41978062 | + + | Yes | 41978195 41976905 | 0.2572 | 3.04E-05 | 4.92E-05 |
| cg15201877 | PTGER3 | 1 | 71285561 | - | Yes | 71286079 | 0.2572 | 2.84E-05 | 4.63E-05 |
| cg03909500 | RLN3R1 | 5 | 33972354 | + | Yes | 33972247 | 0.2567 | 2.81E-05 | 4.58E-05 |
| cg12111714 | ATP8A2 | 13 | 24941472 | + | Yes | 24941114 | 0.2560 | 3.11E-05 | 5.00E-05 |
| cg21907579 | TBX5 | 12 | 113330251 | - - | Yes | 113328272 113330630 | 0.2559 | 3.09E-05 | 4.98E-05 |
| cg19358493 | EMX2 | 10 | 119290932 | + | No | 119291945 | 0.2556 | 3.16E-05 | 5.07E-05 |
| cg04598121 | PENK | 8 | 57521059 | - - | Yes | 57521147 57521836 | 0.2555 | 3.57E-05 | 5.60E-05 |

| | | | | | | | | | |
|------------|-----------|----|-----------|-------|-----|-------------------------|--------|----------|-----------|
| cg05389335 | TACR3 | 4 | 104860768 | - | No | 104860422 | 0.2661 | 1.66E-05 | 2.83E-05 |
| cg09936561 | DRD5 | 4 | 9392721 | + | Yes | 9392355 | 0.2661 | 1.48E-05 | 2.56E-05 |
| cg06186808 | LOC161247 | 14 | 23670741 | + | No | 23670514 | 0.2659 | 1.54E-05 | 2.65E-05 |
| cg02844545 | GCM2 | 6 | 10990029 | - | Yes | 10990084 | 0.2658 | 1.56E-05 | 2.68E-05 |
| cg18876189 | FGB | 4 | 155702533 | + | No | 155703581 | 0.2658 | 1.42E-05 | 2.46E-05 |
| cg07730329 | PCDHGA12 | 5 | 140790321 | + | No | 140790341 | 0.2650 | 1.75E-05 | 2.96E-05 |
| cg01410472 | CRISPLD1 | 8 | 76059530 | + | Yes | 76059397 | 0.2647 | 1.93E-05 | 3.25E-05 |
| cg24169822 | HOXA4 | 7 | 27137519 | - | No | 27136924 | 0.2642 | 1.64E-05 | 2.81E-05 |
| cg06821993 | CSMD3 | 8 | 114518187 | - | No | 114518418 | 0.2641 | 1.67E-05 | 2.85E-05 |
| cg10486998 | GALR1 | 18 | 73090775 | + | Yes | 73090995 | 0.2640 | 1.75E-05 | 2.96E-05 |
| cg11260848 | ALX4 | 11 | 44282836 | NA | Yes | NA | 0.2626 | 1.89E-05 | 3.19E-05 |
| cg11935147 | PDE4DIP | 1 | 143787188 | - | Yes | 143787436 | 0.2620 | 2.06E-05 | 3.43E-05 |
| cg24507762 | KCNB1 | 20 | 47533297 | - | No | 47532588 | 0.2620 | 2.03E-05 | 3.39E-05 |
| cg26181372 | ALDOB | 9 | 103238083 | - | No | 103237883 | 0.2618 | 2.00E-05 | 3.35E-05 |
| cg19282250 | KIAA0367 | 9 | 78518342 | NA | No | NA | 0.2617 | 1.86E-05 | 3.14E-05 |
| cg10356463 | ITIH1 | 3 | 52786416 | + + | No | 52786647 52787562 | 0.2617 | 2.20E-05 | 3.65E-05 |
| cg16415058 | SORCS1 | 10 | 108913771 | - | Yes | 108914282 | 0.2617 | 2.24E-05 | 3.69E-05 |
| cg12781568 | WT1 | 11 | 32408614 | - | Yes | 32408935 | 0.2616 | 1.89E-05 | 3.18E-05 |
| cg24552358 | ORM1 | 9 | 116125879 | + | No | 116125123 | 0.2609 | 2.12E-05 | 3.51E-05 |
| cg04508649 | ANGPTL7 | 1 | 11171633 | + | No | 11171984 | 0.2608 | 2.05E-05 | 3.41E-05 |
| cg11469778 | ARHGEF4 | 2 | 131390671 | + | Yes | 131390693 | 0.2605 | 2.46E-05 | 4.06E-05 |
| cg16937611 | SERPINA5 | 14 | 94117855 | + | No | 94117483 | 0.2594 | 2.62E-05 | 4.29E-05 |
| cg12128839 | HOXA5 | 7 | 27149961 | - | Yes | 27149812 | 0.2590 | 2.52E-05 | 4.14E-05 |
| cg08896945 | CALCB | 11 | 15051644 | + | Yes | 15051721 | 0.2587 | 2.95E-05 | 4.78E-05 |
| cg27420236 | RPRM | 2 | 154042962 | - | Yes | 154043568 | 0.2584 | 2.76E-05 | 4.51E-05 |
| cg12127282 | HOXD4 | 2 | 176722931 | + + | No | 176724358 176723276 | 0.2583 | 2.90E-05 | 4.71E-05 |
| cg12680609 | ZFP41 | 8 | 144399875 | + | Yes | 144400483 | 0.2577 | 3.11E-05 | 5.00E-05 |
| cg16501028 | WT1 | 11 | 32406576 | NA | No | NA | 0.2576 | 2.53E-05 | 4.15E-05 |
| cg11319389 | C20orf100 | 20 | 41978062 | + + | Yes | 41978195 41976905 | 0.2572 | 3.04E-05 | 4.92E-05 |
| cg15201877 | PTGER3 | 1 | 71285561 | - | Yes | 71286079 | 0.2572 | 2.84E-05 | 4.63E-05 |
| cg03909500 | RLN3R1 | 5 | 33972354 | + | Yes | 33972247 | 0.2567 | 2.81E-05 | 4.58E-05 |
| cg12111714 | ATP8A2 | 13 | 24941472 | + | Yes | 24941114 | 0.2560 | 3.11E-05 | 5.00E-05 |
| cg21907579 | TBX5 | 12 | 113330251 | - - | Yes | 113328272 113330630 | 0.2559 | 3.09E-05 | 4.98E-05 |
| cg19358493 | EMX2 | 10 | 119290932 | + | No | 119291945 | 0.2556 | 3.16E-05 | 5.07E-05 |
| cg04598121 | PENK | 8 | 57521059 | - - | Yes | 57521147 57521836 | 0.2555 | 3.57E-05 | 5.60E-05 |
| cg18555440 | MYOD1 | 11 | 17698263 | + | Yes | 17697685 | 0.2551 | 3.39E-05 | 5.39E-05 |
| cg02332525 | GRM7 | 3 | 6878153 | + | Yes | 6877801 | 0.2550 | 3.22E-05 | 5.15E-05 |
| cg06933072 | SAC | 1 | 166149575 | - | No | 166150077 | 0.2550 | 4.04E-05 | 6.27E-05 |
| cg21137417 | SPP2 | 2 | 234624195 | + | No | 234624084 | 0.2544 | 3.53E-05 | 5.56E-05 |
| cg01530101 | KCNQ1DN | 11 | 2847674 | + | Yes | 2847838 | 0.2543 | 3.23E-05 | 5.15E-05 |
| cg19718882 | WIT-1 | 11 | 32415290 | + - | No | 32413860 32413663 | 0.2540 | 3.43E-05 | 5.43E-05 |
| cg09619146 | CPXM2 | 10 | 125641024 | - | Yes | 125641490 | 0.2538 | 3.34E-05 | 5.32E-05 |
| cg16107172 | SLC27A5 | 19 | 63715034 | - | No | 63715244 | 0.2537 | 3.54E-05 | 5.56E-05 |
| cg24194775 | NPR2 | 9 | 35781475 | + | Yes | 35782405 | 0.2537 | 3.44E-05 | 5.43E-05 |
| cg01226811 | KCNJ8 | 12 | 21818879 | - | No | 21819014 | 0.2536 | 3.74E-05 | 5.84E-05 |
| cg23300372 | CART | 5 | 71051188 | + | Yes | 71050749 | 0.2536 | 4.12E-05 | 6.38E-05 |
| cg25463135 | GBP7 | 1 | 89413759 | - | No | 89414311 | 0.2536 | 3.22E-05 | 5.15E-05 |
| cg19576304 | RAX | 18 | 55091002 | - | Yes | 55091605 | 0.2536 | 3.53E-05 | 5.56E-05 |
| cg14262937 | OPRM1 | 6 | 154402044 | + + | No | 154402135 154402238 | 0.2535 | 3.65E-05 | 5.71E-05 |
| cg12343082 | CA5A | 16 | 86527646 | - | No | 86527613 | 0.2534 | 4.09E-05 | 6.34E-05 |
| cg11354906 | SFRP2 | 4 | 154929821 | - | Yes | 154929678 | 0.2531 | 3.43E-05 | 5.43E-05 |
| cg27120999 | HSPA2 | 14 | 64077803 | + | Yes | 64076938 | 0.2518 | 4.19E-05 | 6.47E-05 |
| cg12694870 | HPD | 12 | 120781063 | - | No | 120781152 | 0.2518 | 4.21E-05 | 6.48E-05 |
| cg17963840 | ADRA1A | 8 | 26778778 | - | Yes | 26778839 | 0.2517 | 3.91E-05 | 6.10E-05 |
| cg01283289 | FLJ21963 | 12 | 79996308 | + | Yes | 79995939 | 0.2517 | 3.94E-05 | 6.14E-05 |
| cg02126753 | AEBP1 | 7 | 44110523 | + | No | 44110484 | 0.2509 | 5.95E-05 | 8.92E-05 |
| cg09851465 | C1orf87 | 1 | 60312259 | - | Yes | 60312014 | 0.2506 | 4.54E-05 | 6.98E-05 |
| cg20025656 | ACTA1 | 1 | 227636853 | - | Yes | 227636466 | 0.2502 | 4.56E-05 | 7.00E-05 |
| cg08351331 | LBP | 20 | 36408497 | + | No | 36408298 | 0.2497 | 4.63E-05 | 7.09E-05 |
| cg04456238 | WT1 | 11 | 32406680 | NA | No | NA | 0.2492 | 4.88E-05 | 7.45E-05 |
| cg15781838 | LIMS2 | 2 | 128139187 | - | No | 128138637 | 0.2486 | 4.95E-05 | 7.54E-05 |
| cg16924616 | DLX5 | 7 | 96491553 | - | Yes | 96492079 | 0.2486 | 5.07E-05 | 7.71E-05 |
| cg15522957 | ALX4 | 11 | 44281501 | NA | Yes | NA | 0.2486 | 4.79E-05 | 7.32E-05 |
| cg23694248 | PTPRR | 12 | 69600582 | - | No | 69600851 | 0.2485 | 7.78E-05 | 0.0001126 |
| cg04599297 | GAD2 | 10 | 26545448 | + | Yes | 26545241 | 0.2481 | 5.47E-05 | 8.26E-05 |
| cg10175795 | TCERG1L | 10 | 132999184 | - | Yes | 132999974 | 0.2480 | 5.17E-05 | 7.84E-05 |
| cg20855565 | TRIM58 | 1 | 246086973 | + | Yes | 246087123 | 0.2474 | 5.37E-05 | 8.12E-05 |
| cg25935911 | DBC1 | 9 | 121172082 | - | Yes | 121171560 | 0.2474 | 5.28E-05 | 8.00E-05 |
| cg12332316 | F12 | 5 | 176769078 | - | No | 176769183 | 0.2470 | 5.81E-05 | 8.72E-05 |
| cg25803583 | SERPINF2 | 17 | 1595372 | NA | No | NA | 0.2468 | 5.61E-05 | 8.43E-05 |
| cg14011639 | PCDHGB7 | 5 | 140777418 | + | Yes | 140777465 | 0.2466 | 6.46E-05 | 9.56E-05 |
| cg24999727 | HSD17B13 | 4 | 88462842 | - | No | 88463080 | 0.2461 | 5.50E-05 | 8.29E-05 |
| cg02880679 | MBTD1 | 17 | 46650614 | - | No | 46649776 | 0.2460 | 6.35E-05 | 9.42E-05 |
| cg15467759 | NDST1 | 5 | 149880520 | + | No | 149880622 | 0.2459 | 6.19E-05 | 9.23E-05 |
| cg04922810 | CRHR2 | 7 | 30688413 | - | Yes | 30688665 | 0.2457 | 6.23E-05 | 9.28E-05 |

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|------------|----------|----|-----------|--------|-----|-----------------------------------|--------|-------------|-------------|
| cg09619146 | CPXM2 | 10 | 125641024 | - | Yes | 125641490 | 0.2538 | 3.34E-05 | 5.32E-05 |
| cg16107172 | SLC27A5 | 19 | 63715034 | - | No | 63715244 | 0.2537 | 3.54E-05 | 5.56E-05 |
| cg24194775 | NPR2 | 9 | 35781475 | + | Yes | 35782405 | 0.2537 | 3.44E-05 | 5.43E-05 |
| cg01226811 | KCNJ8 | 12 | 21818879 | - | No | 21819014 | 0.2536 | 3.74E-05 | 5.84E-05 |
| cg23300372 | CART | 5 | 71051188 | + | Yes | 71050749 | 0.2536 | 4.12E-05 | 6.38E-05 |
| cg25463135 | GBP7 | 1 | 89413759 | - | No | 89414311 | 0.2536 | 3.22E-05 | 5.15E-05 |
| cg19576304 | RAX | 18 | 55091002 | - | Yes | 55091605 | 0.2536 | 3.53E-05 | 5.56E-05 |
| cg14262937 | OPRM1 | 6 | 154402044 | ++ | No | 154402135 154402238 | 0.2535 | 3.65E-05 | 5.71E-05 |
| cg12343082 | CA5A | 16 | 86527646 | - | No | 86527613 | 0.2534 | 4.09E-05 | 6.34E-05 |
| cg11354906 | SFRP2 | 4 | 154929821 | - | Yes | 154929678 | 0.2531 | 3.43E-05 | 5.43E-05 |
| cg27120999 | HSPA2 | 14 | 64077803 | + | Yes | 64076938 | 0.2518 | 4.19E-05 | 6.47E-05 |
| cg12694870 | HPD | 12 | 120781063 | - | No | 120781152 | 0.2518 | 4.21E-05 | 6.48E-05 |
| cg17963840 | ADRA1A | 8 | 26778778 | - | Yes | 26778839 | 0.2517 | 3.91E-05 | 6.10E-05 |
| cg01283289 | FLJ21963 | 12 | 79996308 | + | Yes | 79995939 | 0.2517 | 3.94E-05 | 6.14E-05 |
| cg02126753 | AEBP1 | 7 | 44110523 | + | No | 44110484 | 0.2509 | 5.95E-05 | 8.92E-05 |
| cg09851465 | C1orf87 | 1 | 60312259 | - | Yes | 60312014 | 0.2506 | 4.54E-05 | 6.98E-05 |
| cg20025656 | ACTA1 | 1 | 227636853 | - | Yes | 227636466 | 0.2502 | 4.56E-05 | 7.00E-05 |
| cg08351331 | LBP | 20 | 36408497 | + | No | 36408298 | 0.2497 | 4.63E-05 | 7.09E-05 |
| cg04456238 | WT1 | 11 | 32406680 | NA | No | NA | 0.2492 | 4.88E-05 | 7.45E-05 |
| cg15781838 | LIMS2 | 2 | 128139187 | - | No | 128138637 | 0.2486 | 4.95E-05 | 7.54E-05 |
| cg16924616 | DLX5 | 7 | 96491553 | - | Yes | 96492079 | 0.2486 | 5.07E-05 | 7.71E-05 |
| cg15522957 | ALX4 | 11 | 44281501 | NA | Yes | NA | 0.2486 | 4.79E-05 | 7.32E-05 |
| cg23694248 | PTPRR | 12 | 69600582 | - | No | 69600851 | 0.2485 | 7.78E-05 | 0.0001126 |
| cg04599297 | GAD2 | 10 | 26545448 | + | Yes | 26545241 | 0.2481 | 5.47E-05 | 8.26E-05 |
| cg10175795 | TCERG1L | 10 | 132999184 | - | Yes | 132999974 | 0.2480 | 5.17E-05 | 7.84E-05 |
| cg20855565 | TRIM58 | 1 | 246086973 | + | Yes | 246087123 | 0.2474 | 5.37E-05 | 8.12E-05 |
| cg25935911 | DBC1 | 9 | 121172082 | - | Yes | 121171560 | 0.2474 | 5.28E-05 | 8.00E-05 |
| cg12332316 | F12 | 5 | 176769078 | - | No | 176769183 | 0.2470 | 5.81E-05 | 8.72E-05 |
| cg25803583 | SERPINF2 | 17 | 1595372 | NA | No | NA | 0.2468 | 5.61E-05 | 8.43E-05 |
| cg14011639 | PCDHGB7 | 5 | 140777418 | + | Yes | 140777465 | 0.2466 | 6.46E-05 | 9.56E-05 |
| cg24999727 | HSD17B13 | 4 | 88462842 | - | No | 88463080 | 0.2461 | 5.50E-05 | 8.29E-05 |
| cg02880679 | MBTD1 | 17 | 46650614 | - | No | 46649776 | 0.2460 | 6.35E-05 | 9.42E-05 |
| cg15467759 | NDST1 | 5 | 149880520 | + | No | 149880622 | 0.2459 | 6.19E-05 | 9.23E-05 |
| cg04922810 | CRHR2 | 7 | 30688413 | - | Yes | 30688665 | 0.2457 | 6.23E-05 | 9.28E-05 |
| cg19774122 | LAMA2 | 6 | 129246315 | + | No | 129245978 | 0.2456 | 6.24E-05 | 9.28E-05 |
| cg00848728 | DAB1 | 1 | 58488606 | - | Yes | 58488799 | 0.2455 | 6.75E-05 | 9.97E-05 |
| cg13301003 | WT1 | 11 | 32405830 | NA | Yes | NA | 0.2451 | 6.17E-05 | 9.23E-05 |
| cg02681442 | FOXG1B | 14 | 28305759 | + | Yes | 28306037 | 0.2447 | 6.78E-05 | 9.97E-05 |
| cg06493386 | TRPA1 | 8 | 73150351 | - | Yes | 73150373 | 0.2444 | 7.44E-05 | 0.000108492 |
| cg17439694 | CP | 3 | 150422213 | - | No | 150422522 | 0.2442 | 6.43E-05 | 9.52E-05 |
| cg23801057 | P2RX7 | 12 | 120054352 | + | No | 120055060 | 0.2440 | 7.02E-05 | 0.000102838 |
| cg02218214 | ANGPTL3 | 1 | 62835077 | + | No | 62835774 | 0.2435 | 6.90E-05 | 0.000101368 |
| cg22836229 | EFCAB1 | 8 | 49810270 | - | Yes | 49810423 | 0.2432 | 6.77E-05 | 9.97E-05 |
| cg27223047 | FBN2 | 5 | 127902724 | - | Yes | 127901634 | 0.2432 | 7.36E-05 | 0.000107413 |
| cg13870866 | TBX20 | 7 | 35259655 | - | Yes | 35260236 | 0.2430 | 7.63E-05 | 0.000110829 |
| cg05368341 | SYT6 | 1 | 114497988 | - | Yes | 114497995 | 0.2430 | 7.22E-05 | 0.000105597 |
| cg27169020 | BNC1 | 15 | 81745233 | - | No | 81744472 | 0.2427 | 7.65E-05 | 0.000110853 |
| cg07376535 | ADCYAP1 | 18 | 895450 | ++ | Yes | 895296 894943 | 0.2427 | 8.33E-05 | 0.000120062 |
| cg24653967 | PRH1 | 12 | 10928351 | NA | No | NA | 0.2422 | 7.99E-05 | 0.0001154 |
| cg22449114 | TCF15 | 20 | 538243 | - | Yes | 538910 | 0.2422 | 7.58E-05 | 0.000110264 |
| cg02422694 | HOXB4 | 17 | 44010789 | - - | No | 44010742 44012308 | 0.2409 | 8.60E-05 | 0.000123604 |
| cg11152574 | ACSL5 | 10 | 114124540 | ++ + + | No | 114123905 114125012 114125945 | 0.2405 | 8.89E-05 | 0.00012729 |
| cg03425110 | NEUROG3 | 10 | 71003043 | - | Yes | 71003128 | 0.2405 | 8.60E-05 | 0.000123604 |
| cg06625767 | F12 | 5 | 176769301 | - | No | 176769183 | 0.2404 | 9.21E-05 | 0.000131111 |
| cg19058765 | APOH | 17 | 61656565 | - | No | 61656018 | 0.2403 | 9.75E-05 | 0.000137843 |
| cg07005513 | FADS2 | 11 | 61352532 | + | Yes | 61352288 | 0.2402 | 9.70E-05 | 0.000137649 |
| cg22801690 | DAO | 12 | 107798370 | + | No | 107797985 | 0.2400 | 9.01E-05 | 0.000128514 |
| cg17854440 | ENPEP | 4 | 111617030 | + | Yes | 111616677 | 0.2398 | 9.33E-05 | 0.000132653 |
| cg27114120 | PROKR2 | 20 | 5244302 | - | Yes | 5243015 | 0.2392 | 9.84E-05 | 0.000138889 |
| cg11368643 | PCDHB15 | 5 | 140605243 | + | No | 140605330 | 0.2392 | 8.93E-05 | 0.000127601 |
| cg07084163 | UGT3A2 | 5 | 36102540 | - | No | 36102741 | 0.2392 | 0.000109626 | 0.000153438 |
| cg05910970 | CYP2A6 | 19 | 46047813 | - | No | 46048192 | 0.2390 | 8.77E-05 | 0.000125784 |
| cg18671950 | FBN1 | 15 | 46724245 | - | Yes | 46725210 | 0.2390 | 0.000139333 | 0.000190728 |
| cg02613386 | FBXO39 | 17 | 6620257 | + | Yes | 6620275 | 0.2379 | 0.00014377 | 0.000196138 |
| cg19764418 | RYR2 | 1 | 235271721 | + | Yes | 235272324 | 0.2379 | 9.74E-05 | 0.000137843 |
| cg19352038 | PAX3 | 2 | 222873113 | - | No | 222871944 | 0.2377 | 0.000103461 | 0.000145566 |
| cg16211684 | PCDH21 | 10 | 85944602 | + | Yes | 85944496 | 0.2377 | 0.00010296 | 0.000145113 |
| cg23967169 | FAM19A4 | 3 | 69064193 | - | Yes | 69064401 | 0.2374 | 0.000120226 | 0.000165978 |
| cg06092815 | SKIP | 2 | 228754650 | - | Yes | 228754605 | 0.2374 | 0.000112664 | 0.000156876 |
| cg19622372 | CYP2D7P1 | 22 | 40870640 | - | No | 40870519 | 0.2372 | 0.000107062 | 0.000150369 |
| cg25057743 | PTHR2 | 2 | 208979750 | + | Yes | 208979800 | 0.2371 | 0.000116444 | 0.000161031 |
| cg11946503 | NEUROG1 | 5 | 134898413 | - | No | 134899538 | 0.2361 | 0.000110672 | 0.000154635 |
| cg27409364 | KCNC1 | 11 | 17714319 | + | Yes | 17714070 | 0.2359 | 0.00011213 | 0.000156401 |
| cg16154416 | RASGRF1 | 15 | 77169822 | - | Yes | 77170270 | 0.2359 | 0.000108492 | 0.000152114 |
| cg03483626 | KCNA3 | 1 | 111019799 | - | No | 111019178 | 0.2358 | 0.000114996 | 0.000159574 |
| cg20723355 | FBXO39 | 17 | 6620321 | + | Yes | 6620275 | 0.2358 | 0.000164809 | 0.000222589 |
| cg24315815 | PLSCR4 | 3 | 147452269 | - - | No | 147451656 147451341 | 0.2358 | 0.000115586 | 0.000160119 |
| cg26154999 | FLJ22746 | 2 | 224974590 | - | No | 224974955 | 0.2358 | 0.00011328 | 0.000157463 |
| cg03734874 | FLJ42486 | 14 | 104142427 | - | Yes | 104142142 | 0.2355 | 0.000123257 | 0.000169872 |
| cg23418591 | FLJ90166 | 20 | 56523723 | - | Yes | 56523355 | 0.2355 | 0.000137916 | 0.000189108 |
| cg13302823 | SCRT1 | 8 | 145530600 | - | Yes | 145530751 | 0.2343 | 0.000127347 | 0.00017521 |
| cg26609631 | GSH1 | 13 | 27264814 | + | Yes | 27264779 | 0.2339 | 0.000164305 | 0.000222589 |

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|------------|----------|----|-----------|---------|-----|---------------------------------|--------|-------------|-------------|
| cg22422694 | FOXP1 | 17 | 538243 | - - | Yes | 538243 | 0.2422 | 7.38E-05 | 0.000110204 |
| cg02422694 | HOBX84 | 20 | 44010789 | - - | No | 44010742 44012308 | 0.2409 | 8.60E-05 | 0.000123604 |
| cg11152574 | ACSL5 | 10 | 114124540 | + + + | No | 114123905 114125012 114125945 | 0.2405 | 8.89E-05 | 0.00012729 |
| cg03425110 | NEUROG3 | 10 | 71003043 | - | Yes | 71003128 | 0.2405 | 8.60E-05 | 0.000123604 |
| cg06625767 | F12 | 5 | 176769301 | - | No | 176769183 | 0.2404 | 9.21E-05 | 0.000131111 |
| cg19058765 | APOH | 17 | 61656565 | - | No | 61656018 | 0.2403 | 9.75E-05 | 0.000137843 |
| cg07005513 | FADS2 | 11 | 61352532 | + | Yes | 61352288 | 0.2402 | 9.70E-05 | 0.000137649 |
| cg22801690 | DAO | 12 | 107798370 | + | No | 107797985 | 0.2400 | 9.01E-05 | 0.000128514 |
| cg17854440 | ENPEP | 4 | 111617030 | + | Yes | 111616677 | 0.2398 | 9.33E-05 | 0.000132653 |
| cg27114120 | PROKR2 | 20 | 5244302 | - | Yes | 5243015 | 0.2392 | 9.84E-05 | 0.000138889 |
| cg11368643 | PCDHB15 | 5 | 140605243 | + | No | 140605330 | 0.2392 | 8.93E-05 | 0.000127601 |
| cg07084163 | UGT3A2 | 5 | 36102540 | - | No | 36102741 | 0.2392 | 0.000109626 | 0.000153438 |
| cg05910970 | CYP2A6 | 19 | 46047813 | - | No | 46048192 | 0.2390 | 8.77E-05 | 0.000125784 |
| cg18671950 | FBN1 | 15 | 46724245 | - | Yes | 46725210 | 0.2390 | 0.000139333 | 0.000190728 |
| cg02613386 | FBXO39 | 17 | 6620257 | + | Yes | 6620275 | 0.2379 | 0.00014377 | 0.000196138 |
| cg19764418 | RYR2 | 1 | 235271721 | + | Yes | 235272324 | 0.2379 | 9.74E-05 | 0.000137843 |
| cg19352038 | PAX3 | 2 | 222873113 | - | No | 222871944 | 0.2377 | 0.000103461 | 0.000145566 |
| cg16211684 | PCDH21 | 10 | 85944602 | + | Yes | 85944496 | 0.2377 | 0.00010296 | 0.000145113 |
| cg23967169 | FAM19A4 | 3 | 69064193 | - | Yes | 69064401 | 0.2374 | 0.000120226 | 0.000165978 |
| cg06092815 | SKIP | 2 | 228754650 | - | Yes | 228754605 | 0.2374 | 0.000112664 | 0.000156876 |
| cg19622372 | CYP2D7P1 | 22 | 40870640 | - | No | 40870519 | 0.2372 | 0.000107062 | 0.000150369 |
| cg25057743 | PTHR2 | 2 | 208979750 | + | Yes | 208979800 | 0.2371 | 0.000116444 | 0.000161031 |
| cg11946503 | NEUROG1 | 5 | 134898413 | - | No | 134899538 | 0.2361 | 0.000110672 | 0.000154635 |
| cg27409364 | KCNC1 | 11 | 17714319 | + | Yes | 17714070 | 0.2359 | 0.00011213 | 0.000156401 |
| cg16154416 | RASGRF1 | 15 | 77169822 | - | Yes | 77170270 | 0.2359 | 0.000108492 | 0.000152114 |
| cg03483626 | KCNA3 | 1 | 111019799 | - | No | 111019178 | 0.2358 | 0.000114996 | 0.000159574 |
| cg20723355 | FBXO39 | 17 | 6620321 | + | Yes | 6620275 | 0.2358 | 0.000164809 | 0.000222589 |
| cg24315815 | PLSCR4 | 3 | 147452269 | - - | No | 147451656 147451341 | 0.2358 | 0.000115586 | 0.000160119 |
| cg26154999 | FLJ22746 | 2 | 224974590 | - | No | 224974955 | 0.2358 | 0.00011328 | 0.000157463 |
| cg03734874 | FLJ42486 | 14 | 104142427 | - | Yes | 104142142 | 0.2355 | 0.000123257 | 0.000169872 |
| cg23418591 | FLJ90166 | 20 | 56523723 | - | Yes | 56523355 | 0.2355 | 0.000137916 | 0.000189108 |
| cg13302823 | SCRT1 | 8 | 145530600 | - | Yes | 145530751 | 0.2343 | 0.000127347 | 0.00017521 |
| cg26609631 | GSH1 | 13 | 27264814 | + | Yes | 27264779 | 0.2339 | 0.000164305 | 0.000222589 |
| cg17560332 | BOLL | 2 | 198359548 | - - | Yes | 198358319 198359183 | 0.2331 | 0.000154126 | 0.000209559 |
| cg25905812 | DMRT1 | 9 | 831632 | + | Yes | 831689 | 0.2323 | 0.000135686 | 0.000186366 |
| cg04457979 | KCNQ1DN | 11 | 2847223 | + | Yes | 2847838 | 0.2322 | 0.000149656 | 0.000203824 |
| cg08815403 | HSD17B13 | 4 | 88463166 | - | No | 88463080 | 0.2321 | 0.000140475 | 0.000191967 |
| cg25047280 | HOXA9 | 7 | 27172004 | - | Yes | 27171674 | 0.2313 | 0.000180297 | 0.00024174 |
| cg16098981 | C20orf39 | 20 | 24397865 | + | Yes | 24397834 | 0.2312 | 0.00019564 | 0.000260746 |
| cg19018097 | FLJ30934 | 11 | 65357904 | + | Yes | 65357985 | 0.2308 | 0.000217352 | 0.000286482 |
| cg04096767 | WT1 | 11 | 32406026 | NA | Yes | NA | 0.2305 | 0.000175948 | 0.000236841 |
| cg27546237 | COL4A1 | 13 | 109758453 | + - | Yes | 109757631 109757497 | 0.2303 | 0.000211935 | 0.000280614 |
| cg13077930 | ALB | 4 | 74488389 | + | No | 74488835 | 0.2303 | 0.000158988 | 0.000215808 |
| cg21245652 | MAL | 2 | 95054778 | + | Yes | 95055205 | 0.2298 | 0.000182966 | 0.000244257 |
| cg03556497 | SLC32A1 | 20 | 36786206 | + | Yes | 36786518 | 0.2297 | 0.000173322 | 0.000233695 |
| cg01693350 | WT1 | 11 | 32408763 | - | Yes | 32408935 | 0.2296 | 0.000164794 | 0.000222589 |
| cg15183083 | KCNA4 | 11 | 29994886 | - | No | 29995064 | 0.2291 | 0.000180623 | 0.00024174 |
| cg17190608 | CUTL2 | 12 | 109955872 | + | Yes | 109956211 | 0.2289 | 0.000177757 | 0.00023888 |
| cg14144305 | ALX4 | 11 | 44282536 | NA | Yes | NA | 0.2289 | 0.000180782 | 0.00024174 |
| cg15639951 | MAP3K14 | 17 | 40723392 | - | No | 40724123 | 0.2281 | 0.000205353 | 0.000273173 |
| cg25484904 | FLJ21511 | 4 | 48682772 | + | Yes | 48683021 | 0.2274 | 0.000227645 | 0.000298484 |
| cg24101578 | CDH22 | 20 | 44313670 | - | Yes | 44313741 | 0.2272 | 0.00020564 | 0.000273173 |
| cg19096475 | ASAM | 11 | 122571739 | - | Yes | 122571217 | 0.2267 | 0.000207521 | 0.000275221 |
| cg06765947 | UROC1 | 3 | 127719432 | - | No | 127719306 | 0.2264 | 0.00021776 | 0.000286482 |
| cg21053529 | CX36 | 15 | 32834052 | - | Yes | 32833981 | 0.2260 | 0.000217783 | 0.000286482 |
| cg21696393 | SOX8 | 16 | 970402 | + | Yes | 971808 | 0.2258 | 0.000230196 | 0.000301341 |
| cg18645952 | PLGLB2 | 2 | 87829023 | + + | No | 87828720 87828724 | 0.2258 | 0.000215241 | 0.000284526 |
| cg24655310 | CYP4F11 | 19 | 15906119 | - | No | 15906676 | 0.2253 | 0.000244448 | 0.000318966 |
| cg01095395 | IMP2 | 3 | 102522062 | - | No | 102522109 | 0.2253 | 0.000225521 | 0.000296179 |
| cg02657438 | STON2 | 14 | 80934652 | - | No | 80934680 | 0.2243 | 0.000233624 | 0.000305334 |
| cg20647137 | AKR1D1 | 7 | 137411829 | + | No | 137411735 | 0.2242 | 0.000248845 | 0.000324179 |
| cg10217445 | OLIG2 | 21 | 33319654 | + | Yes | 33320108 | 0.2237 | 0.000253854 | 0.000330174 |
| cg13770446 | CLCNKA | 1 | 16222379 | + | No | 16221072 | 0.2223 | 0.000272304 | 0.000353602 |
| cg24989962 | PTGDR | 14 | 51804036 | + | Yes | 51804180 | 0.2223 | 0.000301723 | 0.000388685 |
| cg00540769 | ACOT12 | 5 | 80725248 | - | No | 80725744 | 0.2221 | 0.000334464 | 0.00042535 |
| cg00548268 | NPTX2 | 7 | 98083766 | + | Yes | 98084532 | 0.2221 | 0.000286763 | 0.000370593 |
| cg00295325 | ABC11 | 2 | 169596178 | - | No | 169596079 | 0.2218 | 0.000279417 | 0.000362257 |
| cg22134325 | NPAS4 | 11 | 65945321 | + | Yes | 65945050 | 0.2217 | 0.000286648 | 0.000370593 |
| cg20366906 | PCDH8 | 13 | 52320382 | - | Yes | 52320775 | 0.2210 | 0.000315042 | 0.000403913 |
| cg03032025 | CPEB4 | 5 | 173249354 | + | No | 173247936 | 0.2207 | 0.000295171 | 0.000380851 |
| cg01353448 | C7orf16 | 7 | 31693437 | + | No | 31693323 | 0.2204 | 0.000320953 | 0.000410192 |
| cg10334928 | STON2 | 14 | 80934760 | - | No | 80934680 | 0.2204 | 0.000308563 | 0.000396864 |
| cg12847373 | EDNRB | 13 | 77391350 | - | Yes | 77390967 | 0.2195 | 0.000322395 | 0.000411384 |
| cg22459146 | GHSR | 3 | 173649724 | - | No | 173648897 | 0.2194 | 0.000320953 | 0.000410192 |
| cg22678136 | SNRPN | 15 | 22644614 | NA | Yes | NA | 0.2194 | 0.000313305 | 0.000402323 |
| cg12699371 | GALR1 | 18 | 73090412 | + | Yes | 73090995 | 0.2191 | 0.000334918 | 0.00042535 |
| cg19714296 | CYP4A11 | 1 | 47179987 | - | No | 47179743 | 0.2191 | 0.00032758 | 0.000417342 |
| cg03400060 | BHMT2 | 5 | 78401557 | + - | Yes | 78401338 78401205 | 0.2187 | 0.000337173 | 0.000427544 |
| cg12052765 | CHAT | 10 | 50486969 | + + | Yes | 50487146 50488352 | 0.2186 | 0.000348848 | 0.000441655 |
| cg20798152 | CART | 5 | 71050656 | + | Yes | 71050749 | 0.2183 | 0.000349995 | 0.000441801 |
| cg26718585 | PROC | 2 | 127892924 | + | No | 127892486 | 0.2181 | 0.000377712 | 0.000475224 |
| cg05135288 | RHOT2 | 16 | 657708 | + | No | 658133 | 0.2178 | 0.000350055 | 0.000441801 |
| cg06141025 | GYS2 | 12 | 21648733 | - | No | 21649048 | 0.2172 | 0.000383952 | 0.000482325 |
| cg16196812 | PRLHR | 10 | 120345129 | - | Yes | 120345150 | 0.2169 | 0.000368494 | 0.000464348 |
| cg20523861 | KLHL1 | 13 | 69580325 | + - | Yes | 69579345 69580626 | 0.2166 | 0.00038805 | 0.000486716 |
| cg15736165 | BNC1 | 15 | 81742736 | - | No | 81744472 | 0.2163 | 0.000390531 | 0.000489071 |
| cg21815667 | HOXD8 | 2 | 176702087 | + | Yes | 176702722 | 0.2163 | 0.000399349 | 0.000499341 |
| cg24130010 | CHODL | 21 | 18539047 | + | Yes | 18539020 | 0.2153 | 0.000415384 | 0.000518589 |
| cg08876932 | PHOX2A | 11 | 71633195 | - | Yes | 71632868 | 0.2147 | 0.000446518 | 0.000556599 |
| cg04008843 | TTR | 18 | 27424926 | + | No | 27425727 | 0.2141 | 0.000459084 | 0.000571383 |

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| cg20647137 | AKR1D1 | 7 | 137411829 | + | No | 137411735 | 0.2242 | 0.000248845 | 0.000324179 |
| cg10217445 | OLIG2 | 21 | 33319654 | + | Yes | 33320108 | 0.2237 | 0.000253854 | 0.000330174 |
| cg13770446 | CLCNKA | 1 | 16222379 | + | No | 162221072 | 0.2223 | 0.000272304 | 0.000353602 |
| cg24989962 | PTGDR | 14 | 51804036 | + | Yes | 51804180 | 0.2223 | 0.000301723 | 0.000388685 |
| cg00540769 | ACOT12 | 5 | 80725248 | - | No | 80725744 | 0.2221 | 0.000334464 | 0.00042535 |
| cg00548268 | NPTX2 | 7 | 98083766 | + | Yes | 98084532 | 0.2221 | 0.000286763 | 0.000370593 |
| cg00295325 | ABCB11 | 2 | 169596178 | - | No | 169596079 | 0.2218 | 0.000279417 | 0.000362257 |
| cg22134325 | NPAS4 | 11 | 65945321 | + | Yes | 65945050 | 0.2217 | 0.000286648 | 0.000370593 |
| cg20366906 | PCDH8 | 13 | 52320382 | - | Yes | 52320775 | 0.2210 | 0.000315042 | 0.000403913 |
| cg03032025 | CPEB4 | 5 | 173249354 | + | No | 173247936 | 0.2207 | 0.000295171 | 0.000380851 |
| cg01353448 | C7orf16 | 7 | 31693437 | + | No | 31693323 | 0.2204 | 0.000320953 | 0.000410192 |
| cg10334928 | STON2 | 14 | 80934760 | - | No | 80934680 | 0.2204 | 0.000308563 | 0.000396864 |
| cg12847373 | EDNRB | 13 | 77391350 | - | Yes | 77390967 | 0.2195 | 0.000322395 | 0.000411384 |
| cg22459146 | GHSR | 3 | 173649724 | - | No | 173648897 | 0.2194 | 0.000320953 | 0.000410192 |
| cg22678136 | SNRPN | 15 | 22644614 | NA | Yes | NA | 0.2194 | 0.000313305 | 0.000402323 |
| cg12699371 | GALR1 | 18 | 73090412 | + | Yes | 73090995 | 0.2191 | 0.000334918 | 0.00042535 |
| cg19714296 | CYP4A11 | 1 | 47179987 | - | No | 47179743 | 0.2191 | 0.00032758 | 0.000417342 |
| cg03400060 | BHMT2 | 5 | 78401557 | + - | Yes | 78401338 78401205 | 0.2187 | 0.000337173 | 0.000427544 |
| cg12052765 | CHAT | 10 | 50486969 | + + | Yes | 50487146 50488352 | 0.2186 | 0.000348848 | 0.000441655 |
| cg20798152 | CART | 5 | 71050656 | + | Yes | 71050749 | 0.2183 | 0.000349995 | 0.000441801 |
| cg26718585 | PROC | 2 | 127892924 | + | No | 127892486 | 0.2181 | 0.000377712 | 0.000475224 |
| cg05135288 | RHOT2 | 16 | 657708 | + | No | 658133 | 0.2178 | 0.000350055 | 0.000441801 |
| cg06141025 | GYS2 | 12 | 21648733 | - | No | 21649048 | 0.2172 | 0.000383952 | 0.000482325 |
| cg16196812 | PRLHR | 10 | 120345129 | - | Yes | 120345150 | 0.2169 | 0.000368494 | 0.000464348 |
| cg20523861 | KLHL1 | 13 | 69580325 | + - | Yes | 69579345 69580626 | 0.2166 | 0.00038805 | 0.000486716 |
| cg15736165 | BNC1 | 15 | 81742736 | - | No | 81744472 | 0.2163 | 0.000390531 | 0.000489071 |
| cg21815667 | HOXD8 | 2 | 176702087 | + | Yes | 176702722 | 0.2163 | 0.000399349 | 0.000499341 |
| cg24130010 | CHODL | 21 | 18539047 | + | Yes | 18539020 | 0.2153 | 0.000415384 | 0.000518589 |
| cg08876932 | PHOX2A | 11 | 71633195 | - | Yes | 71632868 | 0.2147 | 0.000446518 | 0.000556599 |
| cg04008843 | TTR | 18 | 27424926 | + | No | 27425727 | 0.2141 | 0.000459084 | 0.000571383 |
| cg07749074 | HRG | 3 | 187866080 | + | No | 187866491 | 0.2134 | 0.000489875 | 0.000605052 |
| cg16463460 | WT1 | 11 | 32411294 | NA | No | NA | 0.2132 | 0.000466255 | 0.000579417 |
| cg24214470 | SERPINF1 | 17 | 1611869 | + | No | 1612008 | 0.2130 | 0.00047663 | 0.000591401 |
| cg26661623 | ASGR2 | 17 | 6959986 | - - | No | 6958353 6958852 | 0.2130 | 0.000512567 | 0.000632113 |
| cg21979032 | CYP8B1 | 3 | 42892521 | - | No | 42892637 | 0.2127 | 0.000480817 | 0.000595683 |
| cg16519321 | MYOD1 | 11 | 17697819 | + | Yes | 17697685 | 0.2125 | 0.000489791 | 0.000605052 |
| cg15539420 | HOXB8 | 17 | 44047247 | - | No | 44047300 | 0.2122 | 0.000559446 | 0.000684707 |
| cg15604467 | POU4F1 | 13 | 78075926 | - | Yes | 78075696 | 0.2117 | 0.000599137 | 0.000731074 |
| cg09878269 | PROZ | 13 | 112860525 | + | No | 112860968 | 0.2113 | 0.000550716 | 0.000675045 |
| cg15201291 | CYP2C8 | 10 | 96820092 | - | No | 96819244 | 0.2111 | 0.000535904 | 0.000659888 |
| cg00239071 | C14orf68 | 14 | 99859490 | + | No | 99859431 | 0.2104 | 0.000550665 | 0.000675045 |
| cg06432655 | CLIPR-59 | 19 | 41215245 | - | Yes | 41215615 | 0.2103 | 0.00054695 | 0.000672466 |
| cg16465769 | SLC22A7 | 6 | 43374129 | - | No | 43373975 | 0.2093 | 0.0005778 | 0.000706104 |
| cg03285457 | LBX1 | 10 | 102978519 | + - | Yes | 102979340 102978707 | 0.2087 | 0.000631288 | 0.000769145 |
| cg17412258 | DLK1 | 14 | 100262770 | + | Yes | 100263005 | 0.2072 | 0.000699034 | 0.000850404 |
| cg27626299 | EVX1 | 7 | 27248956 | + | Yes | 27248688 | 0.2068 | 0.000766214 | 0.000926558 |
| cg08521225 | TTR | 18 | 27425975 | + | No | 27425727 | 0.2063 | 0.000717999 | 0.000872164 |
| cg25426743 | HOXA3 | 7 | 27132628 | - | No | 27133164 | 0.2059 | 0.000730851 | 0.000886444 |
| cg04369341 | C20orf100 | 20 | 41978436 | + + | Yes | 41978195 41976905 | 0.2058 | 0.000829548 | 0.000998667 |
| cg20791593 | NEU4 | 2 | 242400469 | + | No | 242400745 | 0.2053 | 0.000782515 | 0.000943449 |
| cg26033710 | TACR1 | 2 | 75279757 | - | No | 75280153 | 0.2048 | 0.000763184 | 0.000924275 |
| cg16398289 | WDR49 | 3 | 168855439 | - | No | 168853983 | 0.2046 | 0.000780407 | 0.000942312 |
| cg27634151 | GPR83 | 11 | 93774294 | - | Yes | 93774233 | 0.2046 | 0.000917108 | 0.001094307 |
| cg06937608 | AGC1 | 15 | 87147048 | + | Yes | 87147677 | 0.2036 | 0.000862563 | 0.001035331 |
| cg08109815 | NMBR | 6 | 142451524 | - | Yes | 142451629 | 0.2029 | 0.000886192 | 0.00105898 |
| cg04007936 | CARHSP1 | 16 | 8861518 | NA | No | NA | 0.2028 | 0.000880985 | 0.001054314 |
| cg11532513 | LRTM1 | 3 | 54937282 | - | No | 54937112 | 0.2028 | 0.000875489 | 0.001049289 |
| cg03958979 | NR2E1 | 6 | 108593080 | + | Yes | 108593907 | 0.2026 | 0.000857897 | 0.001031261 |
| cg24076884 | PCDHAC2 | 5 | 140327105 | + + | Yes | 140326535 140325930 | 0.2019 | 0.000948213 | 0.001128095 |
| cg03171924 | RUNX3 | 1 | 25130919 | - | Yes | 25129357 | 0.2019 | 0.000932168 | 0.00111064 |
| cg08121954 | TDO2 | 4 | 157044653 | + | No | 157044296 | 0.2018 | 0.000965685 | 0.001147194 |
| cg12172720 | SYNPO | 5 | 149999796 | + | No | 150000399 | 0.2014 | 0.001071024 | 0.001263059 |
| cg15836660 | EDNRB | 13 | 77391129 | - | Yes | 77390967 | 0.2010 | 0.000983909 | 0.00116713 |
| cg15607672 | OTX2 | 14 | 56346980 | - | No | 56346937 | 0.2005 | 0.001046254 | 0.001235649 |
| cg15310873 | C20orf85 | 20 | 56159499 | + | Yes | 56159388 | 0.2000 | 0.001031884 | 0.00122046 |
| cg02280309 | PCLR | 1 | 153537584 | - - | No | 153537849 153537416 | 0.1999 | 0.001027974 | 0.001217615 |
| cg20654468 | LPXN | 11 | 58099573 | - | No | 58099966 | 0.1995 | 0.001094043 | 0.001288327 |
| cg20587168 | MGC33407 | 19 | 8669829 | - | Yes | 8670172 | 0.1980 | 0.001133745 | 0.001331204 |
| cg19475870 | CDH9 | 5 | 27074362 | - | No | 27074446 | 0.1978 | 0.001132751 | 0.001331204 |
| cg21968796 | C21orf70 | 21 | 45182960 | + - | No | 45184382 45184256 | 0.1976 | 0.001158534 | 0.001358339 |
| cg12910797 | HOXB3 | 17 | 44006721 | - | No | 44006809 | 0.1976 | 0.001235243 | 0.001446181 |
| cg04144788 | OXCT2 | 1 | 40009007 | - | Yes | 40009607 | 0.1968 | 0.001340922 | 0.001556393 |
| cg05307923 | ADARB2 | 10 | 1769667 | - | Yes | 1769718 | 0.1960 | 0.00127944 | 0.001495762 |
| cg19594666 | LEP | 7 | 127668516 | + | Yes | 127668566 | 0.1958 | 0.001330649 | 0.001551145 |
| cg02161900 | IRXL1 | 10 | 28075637 | - | No | 28074784 | 0.1957 | 0.001361333 | 0.00157782 |
| cg03240509 | KCNA6 | 12 | 4788430 | + | Yes | 4788602 | 0.1956 | 0.001332665 | 0.00155126 |
| cg27227797 | THEG | 19 | 326831 | - | Yes | 327009 | 0.1951 | 0.001340873 | 0.001556393 |
| cg23303408 | POU4F3 | 5 | 145698790 | + | Yes | 145698779 | 0.1950 | 0.001323539 | 0.001545083 |
| cg19751300 | ST8SIA5 | 18 | 42590397 | - | Yes | 42591037 | 0.1936 | 0.001514757 | 0.001748129 |
| cg25511429 | NRN1 | 6 | 5953124 | - | No | 5952632 | 0.1936 | 0.001561682 | 0.001794604 |
| cg05373457 | KCNS2 | 8 | 99509124 | + | Yes | 99508425 | 0.1936 | 0.00155546 | 0.001789996 |
| cg12508624 | THY1 | 11 | 118798990 | - | Yes | 118799456 | 0.1935 | 0.001407926 | 0.001629488 |
| cg06918467 | OLIG3 | 6 | 137857232 | - | No | 137857224 | 0.1930 | 0.001508238 | 0.001743092 |
| cg02305723 | SNRPN | 15 | 22644549 | NA | Yes | NA | 0.1928 | 0.001543114 | 0.001778318 |
| cg16977035 | ALX4 | 11 | 44287050 | - | Yes | 44288292 | 0.1919 | 0.001617737 | 0.001856382 |
| cg05245861 | C18orf34 | 18 | 29274509 | - - | Yes | 29274043 29274683 | 0.1916 | 0.001655809 | 0.001897379 |
| cg22398616 | LECT1 | 13 | 52212204 | - | No | 52211948 | 0.1913 | 0.001734683 | 0.001982145 |
| cg23322523 | TRIM55 | 8 | 67201595 | + | No | 67201831 | 0.1908 | 0.001808595 | 0.002060779 |
| cg17279839 | RARRES2 | 7 | 149669531 | - | Yes | 149669696 | 0.1907 | 0.00173189 | 0.001981752 |
| cg25148589 | GRIA2 | 4 | 158361386 | + + | No | 158361269 158361185 | 0.1904 | 0.001756983 | 0.002004794 |
| cg06269753 | MSC | 8 | 72918425 | - | Yes | 72919285 | 0.1903 | 0.001818286 | 0.002068908 |
| cg15105987 | SOX2 | 3 | 182913011 | + | Yes | 182912415 | 0.1895 | 0.001930709 | 0.002193741 |
| cg10840135 | CYP2D6 | 22 | 40856563 | - | No | 40856827 | 0.1873 | 0.002011195 | 0.002281987 |
| cg07823492 | HOXB1 | 17 | 43963098 | - | Yes | 43963271 | 0.1872 | 0.002049178 | 0.002321828 |
| cg09214254 | SMOC2 | 6 | 168584304 | + | Yes | 168584679 | 0.1867 | 0.002224763 | 0.002513733 |
| cg14753432 | ALX4 | 11 | 44281409 | NA | Yes | NA | 0.1867 | 0.002085142 | 0.002359273 |
| cg15403517 | SRD5A2 | 2 | 31659779 | - | Yes | 31659544 | 0.1863 | 0.002523249 | 0.002839094 |
| cg04049033 | RILP | 17 | 1500411 | - | No | 1500142 | 0.1853 | 0.002321348 | 0.002619205 |
| cg06711560 | MAMDC4 | 9 | 138866186 | + | No | 138866639 | 0.1841 | 0.002678288 | 0.002984483 |

| | | | | | | | | | |
|------------|-----------|----|-----------|---------|-----|----------------------------------|--------|--------------|-------------|
| cg02161900 | IRXL1 | 10 | 28075637 | - | No | 28074784 | 0.1957 | 0.001361333 | 0.00157782 |
| cg03240509 | KCNA6 | 12 | 4788430 | + | Yes | 4788602 | 0.1956 | 0.001332665 | 0.00155126 |
| cg27227797 | THEG | 19 | 326831 | - | Yes | 327009 | 0.1951 | 0.001340873 | 0.001556393 |
| cg23303408 | POU4F3 | 5 | 145698790 | + | Yes | 145698779 | 0.1950 | 0.001323539 | 0.001545083 |
| cg19751300 | ST85IA5 | 18 | 42590397 | - | Yes | 42591037 | 0.1936 | 0.001514757 | 0.001748129 |
| cg25511429 | NRN1 | 6 | 5953124 | - | No | 5952632 | 0.1936 | 0.001561682 | 0.001794604 |
| cg05373457 | KCNS2 | 8 | 99509124 | + | Yes | 99508425 | 0.1936 | 0.00155546 | 0.001789996 |
| cg12508624 | THY1 | 11 | 118798990 | - | Yes | 118799456 | 0.1935 | 0.001407926 | 0.001629488 |
| cg06918467 | OLIG3 | 6 | 137857232 | - | No | 137857224 | 0.1930 | 0.001508238 | 0.001743092 |
| cg02305723 | SNRPN | 15 | 22644549 | NA | Yes | NA | 0.1928 | 0.001543114 | 0.001778318 |
| cg16977035 | ALX4 | 11 | 44287050 | - | Yes | 44288292 | 0.1919 | 0.001617737 | 0.001856382 |
| cg05245861 | C18orf34 | 18 | 29274509 | - - | Yes | 29274043 29274683 | 0.1916 | 0.001655809 | 0.001897379 |
| cg22398616 | LECT1 | 13 | 52212204 | - | No | 52211948 | 0.1913 | 0.001734683 | 0.001982145 |
| cg23322523 | TRIM55 | 8 | 67201595 | + | No | 67201831 | 0.1908 | 0.001808595 | 0.002060779 |
| cg17279839 | RARRES2 | 7 | 149669531 | - | Yes | 149669696 | 0.1907 | 0.00173189 | 0.001981752 |
| cg25148589 | GRIA2 | 4 | 158361386 | ++ + | No | 158361269 158361185 | 0.1904 | 0.001756983 | 0.002004794 |
| cg06269753 | MSC | 8 | 72918425 | - | Yes | 72919285 | 0.1903 | 0.001818286 | 0.002068908 |
| cg15105987 | SOX2 | 3 | 182913011 | + | Yes | 182912415 | 0.1895 | 0.001930709 | 0.002193741 |
| cg10840135 | CYP2D6 | 22 | 40856563 | - | No | 40856827 | 0.1873 | 0.002011195 | 0.002281987 |
| cg07823492 | HOXB1 | 17 | 43963098 | - | Yes | 43963271 | 0.1872 | 0.002049178 | 0.002321828 |
| cg09214254 | SMOC2 | 6 | 168584304 | + | Yes | 168584679 | 0.1867 | 0.002224763 | 0.002513733 |
| cg14753432 | ALX4 | 11 | 44281409 | NA | Yes | NA | 0.1867 | 0.002085142 | 0.002359273 |
| cg15403517 | SRD5A2 | 2 | 31659779 | - | Yes | 31659544 | 0.1863 | 0.002523249 | 0.002839094 |
| cg04049033 | RILP | 17 | 1500411 | - | No | 1500142 | 0.1853 | 0.002321348 | 0.002619205 |
| cg06711560 | MAMDC4 | 9 | 138866186 | + | No | 138866639 | 0.1841 | 0.002678288 | 0.002984483 |
| cg04603031 | CHRNA3 | 15 | 76700211 | - | Yes | 76700377 | 0.1841 | 0.002910972 | 0.003234858 |
| cg25596297 | FLJ32447 | 2 | 222871119 | ++ - | Yes | 222871109 222871944 | 0.1834 | 0.002578873 | 0.002893631 |
| cg21783004 | LECT2 | 5 | 135318187 | - | No | 135318622 | 0.1833 | 0.00261641 | 0.002927629 |
| cg20023231 | HS3ST2 | 16 | 22732783 | + | Yes | 22733360 | 0.1832 | 0.002614667 | 0.002927629 |
| cg24650501 | LMX1A | 1 | 163591614 | - | Yes | 163591641 | 0.1831 | 0.002517267 | 0.002836308 |
| cg02994956 | NEFH | 22 | 28206534 | + | Yes | 28206180 | 0.1830 | 0.002566416 | 0.002883653 |
| cg14189571 | ZFP42 | 4 | 189153937 | + | Yes | 189153918 | 0.1828 | 0.002647884 | 0.002958754 |
| cg13297960 | NCAM2 | 21 | 21292108 | + | Yes | 21292503 | 0.1825 | 0.00272436 | 0.003031647 |
| cg25657700 | SNRPN | 15 | 22674584 | NA | Yes | NA | 0.1824 | 0.002662071 | 0.002970505 |
| cg10114327 | GPR103 | 4 | 122521023 | - | Yes | 122521631 | 0.1803 | 0.003167724 | 0.003510532 |
| cg07339138 | CCDC13 | 3 | 42795278 | NA | No | NA | 0.1800 | 0.003136245 | 0.003480414 |
| cg03160135 | VGLL2 | 6 | 117693611 | ++ + | Yes | 117693413 117693429 | 0.1793 | 0.003464298 | 0.003813084 |
| cg24840099 | MSX1 | 4 | 4915331 | NA | Yes | NA | 0.1791 | 0.003213644 | 0.00355655 |
| cg00546491 | PDE1C | 7 | 32077587 | - | No | 32077516 | 0.1789 | 0.003236163 | 0.003576579 |
| cg22173227 | C4B | 6 | 32056502 | ++ + | No | 32057812 32057812 | 0.1784 | 0.003262717 | 0.003601007 |
| cg22568540 | A1BG | 19 | 63556658 | - | No | 63556677 | 0.1783 | 0.003753075 | 0.004114143 |
| cg02489552 | FLJ40365 | 19 | 14982531 | + | Yes | 14982538 | 0.1774 | 0.003455211 | 0.003808264 |
| cg02409351 | CART1 | 12 | 84198153 | + | Yes | 84198166 | 0.1772 | 0.003846063 | 0.004210372 |
| cg06436504 | DOC1 | 3 | 101316425 | - | No | 101316039 | 0.1771 | 0.003628226 | 0.003982679 |
| cg13041032 | MMP13 | 11 | 102331300 | - | No | 102331672 | 0.1765 | 0.003626615 | 0.003982679 |
| cg17915429 | PGLYRP2 | 19 | 15451069 | - | No | 15451315 | 0.1765 | 0.003996732 | 0.0043694 |
| cg26934034 | SDSL | 12 | 112344593 | + | No | 112344598 | 0.1761 | 0.004060326 | 0.004432934 |
| cg15674997 | GRM6 | 5 | 178353920 | - | Yes | 178354730 | 0.1743 | 0.00413356 | 0.004506806 |
| cg20537629 | MAGI2 | 7 | 78921880 | - | Yes | 78920826 | 0.1734 | 0.004155289 | 0.0045244 |
| cg23317501 | UGT3A1 | 5 | 36026972 | - | No | 36027256 | 0.1734 | 0.004233281 | 0.004603124 |
| cg12782180 | LEP | 7 | 127668168 | + | Yes | 127668566 | 0.1730 | 0.004379362 | 0.004755576 |
| cg24613957 | PLA2G2E | 1 | 20123271 | - | No | 20122697 | 0.1723 | 0.004531862 | 0.004901439 |
| cg26266326 | GCG | 2 | 162716750 | - | No | 162717003 | 0.1723 | 0.004563986 | 0.004929593 |
| cg23824713 | SERPINB5 | 18 | 59308718 | NA | No | NA | 0.1723 | 0.004472576 | 0.004850287 |
| cg09674215 | TWIST1 | 7 | 19124659 | - | Yes | 19123820 | 0.1721 | 0.004502788 | 0.004876513 |
| cg00792849 | CX36 | 15 | 32833902 | - | Yes | 32833981 | 0.1720 | 0.004602233 | 0.004964275 |
| cg27246571 | HAL | 12 | 94913719 | - | Yes | 94914202 | 0.1715 | 0.004978468 | 0.005355826 |
| cg00708598 | LECT1 | 13 | 52211896 | - | Yes | 52211948 | 0.1710 | 0.005276333 | 0.005661212 |
| cg00891278 | CCDC37 | 3 | 127596474 | + | Yes | 127596471 | 0.1709 | 0.005503861 | 0.005889713 |
| cg26832142 | PDE4B | 1 | 66031029 | ++ + | Yes | 66031443 66030780 | 0.1703 | 0.004973629 | 0.005355826 |
| cg04182865 | RNF14 | 5 | 141326615 | + | No | 141326620 | 0.1696 | 0.005090197 | 0.005468751 |
| cg11308840 | LOC401498 | 9 | 32773516 | + | Yes | 32773496 | 0.1689 | 0.005327564 | 0.005708608 |
| cg03882305 | TRIM50C | 7 | 72077882 | - | Yes | 72077933 | 0.1681 | 0.005549023 | 0.005930198 |
| cg17788832 | PSKH2 | 8 | 87150770 | - | Yes | 87150967 | 0.1678 | 0.005696366 | 0.00607963 |
| cg01843018 | C5 | 9 | 122852965 | - | No | 122852375 | 0.1666 | 0.006054808 | 0.006453675 |
| cg02500392 | PBOV1 | 6 | 138581065 | - | No | 138581320 | 0.1663 | 0.006246655 | 0.0066494 |
| cg18573383 | KCNC2 | 12 | 73889668 | - | Yes | 73889778 | 0.1653 | 0.006334066 | 0.006733587 |
| cg07175883 | HOXD13 | 2 | 176666154 | + | Yes | 176665777 | 0.1644 | 0.006728401 | 0.007143408 |
| cg21096915 | MGC16291 | 10 | 42291215 | + | Yes | 42290944 | 0.1643 | 0.006939307 | 0.007357666 |
| cg03811478 | SOX14 | 3 | 138966268 | + | Yes | 138966268 | 0.1638 | 0.007128242 | 0.007538232 |
| cg18743730 | CA4 | 17 | 55581763 | + | No | 55582083 | 0.1636 | 0.007030012 | 0.007444083 |
| cg04527918 | UCN | 2 | 27384674 | - | Yes | 27384634 | 0.1627 | 0.007397909 | 0.00780301 |
| cg01471384 | DKK2 | 4 | 108176714 | - | Yes | 108176902 | 0.1625 | 0.0074111067 | 0.00780671 |
| cg21279601 | DRD5 | 4 | 9392029 | + | Yes | 9392355 | 0.1624 | 0.007386832 | 0.007801498 |
| cg06005396 | HCN2 | 19 | 541541 | + | Yes | 540892 | 0.1616 | 0.007683027 | 0.008082664 |
| cg24019851 | SEMA3B | 3 | 50289295 | NA | Yes | NA | 0.1607 | 0.008014931 | 0.008420882 |
| cg22752533 | SLC12A5 | 20 | 44091355 | + | Yes | 44091227 | 0.1605 | 0.00828928 | 0.008697831 |
| cg03634234 | MLL3 | 7 | 151763151 | ++ - | No | 151764912 151764023 | 0.1570 | 0.009628227 | 0.010089683 |
| cg12319004 | LEFTY1 | 1 | 224144860 | - | No | 224143459 | 0.1550 | 0.010802835 | 0.011305943 |
| cg11864993 | PCDHB16 | 5 | 140540016 | + | Yes | 140541163 | 0.1537 | 0.011228182 | 0.011735917 |
| cg20322977 | CYP26C1 | 10 | 94811075 | + | Yes | 94811010 | 0.1526 | 0.01195887 | 0.012483517 |
| cg11540692 | SIM1 | 6 | 101018793 | - | Yes | 101018272 | 0.1519 | 0.012902548 | 0.013433927 |
| cg13828758 | NDN | 15 | 21483466 | - | Yes | 21483543 | 0.1512 | 0.01241496 | 0.012942916 |
| cg07675169 | C20orf58 | 20 | 61356707 | ++ - | Yes | 61355774 61356337 | 0.1505 | 0.012961078 | 0.013477521 |
| cg22303211 | SOX1 | 13 | 111770172 | + | Yes | 111769913 | 0.1505 | 0.01337843 | 0.013877869 |
| cg23950724 | SYT10 | 12 | 33484444 | - | Yes | 33484021 | 0.1504 | 0.013380393 | 0.013877869 |
| cg20624391 | BVES | 6 | 105690842 | - - | Yes | 105690914 105691236 | 0.1501 | 0.014069204 | 0.014536381 |
| cg20289911 | C20orf55 | 20 | 764362 | - | No | 764710 | 0.1490 | 0.013941919 | 0.014441757 |
| cg26780333 | ACOT4 | 14 | 73128725 | + | Yes | 73128162 | 0.1486 | 0.014005234 | 0.014488791 |
| cg10124201 | BOLL | 2 | 198358997 | - - | Yes | 198358319 198359183 | 0.1480 | 0.014591914 | 0.015057217 |
| cg18087477 | SYCP1 | 1 | 115198977 | + | Yes | 115198977 | 0.1473 | 0.01540114 | 0.015851809 |
| cg17051321 | BNC1 | 15 | 81743512 | - | Yes | 81744472 | 0.1471 | 0.015187281 | 0.015651605 |
| cg11208483 | SOX21 | 13 | 94162234 | - | Yes | 94162390 | 0.1462 | 0.016309773 | 0.0167657 |
| cg12876594 | NPR2 | 9 | 35781798 | + | Yes | 35782405 | 0.1451 | 0.017218119 | 0.017676978 |
| cg02084087 | TNFRSF25 | 1 | 6448636 | - | Yes | 6448842 | 0.1431 | 0.018678916 | 0.019152399 |
| cg09748975 | MSX1 | 4 | 4915433 | NA | Yes | NA | 0.1413 | 0.019690318 | 0.020163882 |
| cg26705561 | SEC31L2 | 10 | 102269781 | - | Yes | 102269585 | 0.1401 | 0.021324616 | 0.021782341 |
| cg10457247 | PRDM14 | 8 | 71145633 | - | Yes | 71146116 | 0.1390 | 0.021302394 | 0.021782341 |
| cg02162069 | ZIM2 | 19 | 62043946 | + - - | Yes | 62044081 62043906 62043909 | 0.1379 | 0.022725408 | 0.023183928 |
| cg16832407 | TRPM3 | 9 | 72926359 | - | No | 72926334 | 0.1367 | 0.023615599 | 0.024061737 |
| cg08758850 | NR6A1 | 9 | 126573375 | - | Yes | 126573397 | 0.1316 | 0.029421204 | 0.029939313 |
| cg15842276 | MTNR1B | 11 | 92342296 | + | Yes | 92342436 | 0.1307 | 0.031298247 | 0.031809399 |
| cg09786257 | PCSK1 | 5 | 95794451 | - | No | 95794708 | 0.1295 | 0.033028743 | 0.033526039 |
| cg24975842 | GNAS | 20 | 56848189 | + | Yes | 56848189 | 0.1283 | 0.034061529 | 0.034531049 |
| cg25176823 | FSCN1 | 7 | 5599119 | - | Yes | 5598979 | 0.1282 | 0.034426154 | 0.03485702 |
| cg07501965 | CHRFA7A | 15 | 28472482 | - | Yes | 28473156 | 0.1275 | 0.036273891 | 0.036681972 |
| cg21296676 | EYA4 | 6 | 133603353 | + | No | 133604187 | 0.1227 | 0.042427821 | 0.042851569 |
| cg14813083 | LDHAL6A | 11 | 18433856 | + | Yes | 18433949 | 0.1220 | | |