

Additional file 1. List of genes used in the Connectivity map analysis for EEDS.

| Up-regulated genes by EEDS | | | Down-regulated genes by EEDS | | |
|----------------------------|-----------|-------------|------------------------------|-----------|-------------|
| Symbol | Entrez ID | Fold (Log2) | Symbol | Entrez ID | Fold (Log2) |
| EGR1 | 1958 | 10.0 | HOXB13 | 10481 | -5.0 |
| FOSB | 2354 | 7.8 | ST6GAL1 | 6480 | -4.8 |
| EGR2 | 1959 | 6.4 | GPRIN2 | 9721 | -4.7 |
| ATF3 | 467 | 5.6 | SALL2 | 6297 | -4.7 |
| PPP1R15A | 23645 | 5.5 | CBR3 | 874 | -4.5 |
| IL8 | 3576 | 5.5 | FANCF | 2188 | -4.5 |
| MAFF | 23764 | 5.0 | CCR7 | 1236 | -4.4 |
| C3orf52 | 79669 | 4.9 | VAV3 | 10451 | -4.3 |
| DDIT3 | 1649 | 4.9 | C14orf93 | 60686 | -4.3 |
| FOS | 2353 | 4.8 | NTHL1 | 4913 | -4.3 |
| LTB | 4050 | 4.8 | VASH1 | 22846 | -4.2 |
| GADD45B | 4616 | 4.8 | TCEA2 | 6919 | -4.2 |
| ARC | 23237 | 4.7 | HSPA8 | 3312 | -4.2 |
| PER1 | 5187 | 4.6 | B4GALNT1 | 2583 | -4.1 |
| SERPINE1 | 5054 | 4.5 | DIXDC1 | 85458 | -4.0 |
| HBEGF | 1839 | 4.4 | NUDT18 | 79873 | -4.0 |
| TNFAIP3 | 7128 | 4.3 | SYT17 | 51760 | -4.0 |
| FOSL1 | 8061 | 4.3 | ACOX2 | 8309 | -3.9 |
| LCAT | 3931 | 4.3 | C3orf18 | 51161 | -3.9 |
| DLX2 | 1746 | 4.2 | SMO | 6608 | -3.8 |
| KLF4 | 9314 | 4.1 | ELAC1 | 55520 | -3.8 |
| GREM1 | 26585 | 4.1 | NNMT | 4837 | -3.8 |
| BIRC3 | 330 | 4.1 | MAGEH1 | 28986 | -3.7 |
| C10orf110 | 55853 | 4.0 | BCAS1 | 8537 | -3.7 |
| AOC3 | 8639 | 4.0 | CNPY2 | 10330 | -3.7 |
| GADD45A | 1647 | 4.0 | MAP2K6 | 5608 | -3.6 |
| KDM6B | 23135 | 3.9 | MTMR4 | 9110 | -3.6 |

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| CYR61 | 3491 | 3.8 | KRCC1 | 51315 | -3.6 |
| STX3 | 6809 | 3.8 | SETBP1 | 26040 | -3.5 |
| EREG | 2069 | 3.8 | FHOD3 | 80206 | -3.5 |
| DNAJB2 | 3300 | 3.8 | B3GALT4 | 8705 | -3.5 |
| CYP1A1 | 1543 | 3.7 | HGD | 3081 | -3.5 |
| PDGFB | 5155 | 3.7 | EHMT2 | 10919 | -3.4 |
| CSF2 | 1437 | 3.7 | THNSL1 | 79896 | -3.4 |
| UGCG | 7357 | 3.7 | PDE8B | 8622 | -3.4 |
| DAAM1 | 23002 | 3.6 | EPB41L4A | 64097 | -3.4 |
| EDN2 | 1907 | 3.6 | HPS6 | 79803 | -3.4 |
| AEN | 64782 | 3.6 | TST | 7263 | -3.3 |
| MCTP1 | 79772 | 3.6 | HS3ST1 | 9957 | -3.3 |
| RASSF1 | 11186 | 3.6 | CTDSPL | 10217 | -3.2 |
| NFKBIE | 4794 | 3.6 | MANSC1 | 54682 | -3.2 |
| TNFRSF12A | 51330 | 3.5 | SMARCAL1 | 50485 | -3.2 |
| SMOX | 54498 | 3.5 | PIK3C2B | 5287 | -3.2 |
| MAP3K14 | 9020 | 3.5 | IDH1 | 3417 | -3.2 |
| GEM | 2669 | 3.5 | PDE7B | 27115 | -3.2 |
| MXD1 | 4084 | 3.4 | DOK1 | 1796 | -3.2 |
| CCL20 | 6364 | 3.4 | RHOBTB1 | 9886 | -3.2 |
| CCRN4L | 25819 | 3.4 | PBX1 | 5087 | -3.2 |
| ASMT | 438 | 3.4 | MORC4 | 79710 | -3.2 |
| PLA2G4C | 8605 | 3.4 | C17orf108 | 201229 | -3.2 |
| BBC3 | 27113 | 3.3 | ADAT1 | 23536 | -3.1 |
| AREG | 374 | 3.3 | RNF43 | 54894 | -3.1 |
| IL11 | 3589 | 3.3 | KCNJ6 | 3763 | -3.1 |
| ETS1 | 2113 | 3.3 | ZC4H2 | 55906 | -3.1 |
| JUN | 3725 | 3.3 | SYT12 | 91683 | -3.1 |
| BTG2 | 7832 | 3.3 | ZNF362 | 149076 | -3.1 |
| TXNL4B | 54957 | 3.3 | TRIM45 | 80263 | -3.0 |
| ANKRD1 | 27063 | 3.3 | CAPN5 | 726 | -3.0 |

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| TMEM156 | 80008 | 3.3 | MGAT3 | 4248 | -3.0 |
| EPHA2 | 1969 | 3.3 | PCYT2 | 5833 | -3.0 |
| HAS2 | 3037 | 3.2 | ABCA3 | 21 | -3.0 |
| ADM | 133 | 3.2 | PLCD1 | 5333 | -3.0 |
| CDKN1A | 1026 | 3.2 | HSPA2 | 3306 | -3.0 |
| SOCS3 | 9021 | 3.2 | PRIM1 | 5557 | -2.9 |
| TNFRSF10D | 8793 | 3.1 | ZNF32 | 7580 | -2.9 |
| OXTR | 5021 | 3.1 | DENND2D | 79961 | -2.9 |
| NFKB2 | 4791 | 3.1 | LARGE | 9215 | -2.9 |
| DUSP10 | 11221 | 3.1 | LXN | 56925 | -2.9 |
| C1orf69 | 200205 | 3.1 | SNPH | 9751 | -2.9 |
| FAM193B | 54540 | 3.0 | RASSF4 | 83937 | -2.9 |
| LOC157562 | 157562 | 3.0 | THYN1 | 29087 | -2.9 |
| CCNL1 | 57018 | 3.0 | FAM55C | 91775 | -2.8 |
| C19orf61 | 56006 | 3.0 | LRRC20 | 55222 | -2.8 |
| ARID3B | 10620 | 3.0 | SLC24A6 | 80024 | -2.8 |
| SDC4 | 6385 | 3.0 | NUDT7 | 283927 | -2.8 |
| MAPK8IP3 | 23162 | 3.0 | PNMAL1 | 55228 | -2.8 |
| GABARAPL1 | 23710 | 3.0 | FAM134B | 54463 | -2.8 |
| KPNA5 | 3841 | 3.0 | GOLSYN | 55638 | -2.8 |
| IL1RAP | 3556 | 3.0 | C16orf42 | 115939 | -2.8 |
| EMP1 | 2012 | 2.9 | CYB5B | 80777 | -2.8 |
| THAP3 | 90326 | 2.9 | GNAZ | 2781 | -2.8 |
| CXCL1 | 2919 | 2.9 | GMPPA | 29926 | -2.8 |
| ADRB2 | 154 | 2.9 | KIAA0485 | 57235 | -2.8 |
| TRAF1 | 7185 | 2.9 | PRMT7 | 54496 | -2.7 |
| CTSK | 1513 | 2.9 | C16orf59 | 80178 | -2.7 |
| TBX21 | 30009 | 2.9 | HOXA6 | 3203 | -2.7 |
| CTGF | 1490 | 2.9 | C5orf54 | 63920 | -2.7 |
| CLCF1 | 23529 | 2.9 | FBXO4 | 26272 | -2.7 |
| IL32 | 9235 | 2.9 | STAT6 | 6778 | -2.7 |

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| LYST | 1130 | 2.8 | GPR162 | 27239 | -2.7 |
| KLF10 | 7071 | 2.8 | THAP7 | 80764 | -2.7 |
| GATA6 | 2627 | 2.8 | JMJD4 | 65094 | -2.7 |
| SERPINB8 | 5271 | 2.8 | SYTL2 | 54843 | -2.7 |
| RIT1 | 6016 | 2.8 | ARRB1 | 408 | -2.6 |
| REL | 5966 | 2.8 | CYP2U1 | 113612 | -2.6 |
| RSRC2 | 65117 | 2.8 | RGL1 | 23179 | -2.6 |
| FOXD1 | 2297 | 2.8 | HOXC4 | 3221 | -2.6 |
| RUNX1 | 861 | 2.8 | SLC22A3 | 6581 | -2.6 |
| PLK3 | 1263 | 2.8 | CBR1 | 873 | -2.6 |
| NFKBIB | 4793 | 2.8 | GEMIN6 | 79833 | -2.6 |
| MAP2K3 | 5606 | 2.8 | KHK | 3795 | -2.6 |
| PTHLH | 5744 | 2.8 | ADRA1D | 146 | -2.6 |
| ZNF484 | 83744 | 2.8 | IL22RA1 | 58985 | -2.6 |
| NAB2 | 4665 | 2.7 | MYLK | 4638 | -2.6 |
| RELB | 5971 | 2.7 | USP9X | 8239 | -2.6 |
| CRY1 | 1407 | 2.7 | CCDC106 | 29903 | -2.6 |
| ZNF136 | 7695 | 2.7 | IFIT1 | 3434 | -2.6 |
| JUNB | 3726 | 2.7 | SAC3D1 | 29901 | -2.5 |
| PPP1R13L | 10848 | 2.7 | ZMYND8 | 23613 | -2.5 |
| STK19 | 8859 | 2.7 | MIIP | 60672 | -2.5 |
| C14orf138 | 79609 | 2.7 | MUTYH | 4595 | -2.5 |
| RSC1A1 | 6248 | 2.7 | LCMT2 | 9836 | -2.5 |
| ARHGAP19 | 84986 | 2.7 | MSTO1 | 55154 | -2.5 |
| LIF | 3976 | 2.6 | TRADD | 8717 | -2.5 |
| STC1 | 6781 | 2.6 | APBA2 | 321 | -2.5 |
| IGF2BP2 | 10644 | 2.6 | BFSP1 | 631 | -2.5 |
| YRDC | 79693 | 2.6 | RNASEL | 6041 | -2.5 |
| IFRD1 | 3475 | 2.6 | HS6ST1 | 9394 | -2.5 |
| JMJD1C | 221037 | 2.6 | DET1 | 55070 | -2.5 |
| TAF1A | 9015 | 2.6 | IMPA2 | 3613 | -2.5 |

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| TLE4 | 7091 | 2.6 | USP18 | 11274 | -2.5 |
| POFUT2 | 23275 | 2.6 | PRKCDBP | 112464 | -2.5 |
| OVGP1 | 5016 | 2.6 | MTUS1 | 57509 | -2.5 |
| PKP2 | 5318 | 2.6 | MAGED4B | 81557 | -2.5 |
| C10orf118 | 55088 | 2.6 | LRFN3 | 79414 | -2.5 |
| SLC19A2 | 10560 | 2.6 | ZNF232 | 7775 | -2.5 |
| ELL | 8178 | 2.6 | FAM102A | 399665 | -2.5 |
| PPM1D | 8493 | 2.6 | RIBC2 | 26150 | -2.5 |
| RLF | 6018 | 2.6 | C7orf68 | 29923 | -2.5 |
| CHD2 | 1106 | 2.6 | RHOBTB2 | 23221 | -2.5 |
| UPF3B | 65109 | 2.6 | EHD3 | 30845 | -2.5 |
| PFKFB4 | 5210 | 2.6 | FZD4 | 8322 | -2.4 |
| IER5 | 51278 | 2.5 | QARS | 5859 | -2.4 |
| GUCA1B | 2979 | 2.5 | PYCARD | 29108 | -2.4 |
| HRK | 8739 | 2.5 | AZI1 | 22994 | -2.4 |
| CCNT2 | 905 | 2.5 | FUT8 | 2530 | -2.4 |
| FBXL12 | 54850 | 2.5 | OSBPL7 | 114881 | -2.4 |
| STARD13 | 90627 | 2.5 | HPGD | 3248 | -2.4 |
| DOHH | 83475 | 2.5 | RDBP | 7936 | -2.4 |
| SLMO1 | 10650 | 2.5 | KRT4 | 3851 | -2.4 |
| TICAM1 | 148022 | 2.5 | ATP13A2 | 23400 | -2.4 |
| ZNF654 | 55279 | 2.5 | CFB | 629 | -2.4 |
| EFNA1 | 1942 | 2.5 | TBC1D16 | 125058 | -2.4 |
| GJB3 | 2707 | 2.5 | FBXO9 | 26268 | -2.4 |
| CDKN2AIP | 55602 | 2.5 | NDRG3 | 57446 | -2.4 |
| DUSP1 | 1843 | 2.5 | HEATR3 | 55027 | -2.4 |
| ZNF143 | 7702 | 2.5 | SPATA7 | 55812 | -2.4 |
| IER2 | 9592 | 2.5 | MMP15 | 4324 | -2.4 |
| TUBA4A | 7277 | 2.5 | PIR | 8544 | -2.4 |
| KLHL28 | 54813 | 2.5 | MPI | 4351 | -2.4 |
| PRDM1 | 639 | 2.4 | TTC12 | 54970 | -2.4 |

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| ACVR2A | 92 | 2.4 | DPYSL3 | 1809 | -2.4 |
| ZNF335 | 63925 | 2.4 | KCNMB4 | 27345 | -2.3 |
| PI4K2A | 55361 | 2.4 | TLL1 | 25809 | -2.3 |
| ID2 | 3398 | 2.4 | SIDT2 | 51092 | -2.3 |
| PRPF39 | 55015 | 2.4 | IMPACT | 55364 | -2.3 |
| FERMT2 | 10979 | 2.4 | MAP4K2 | 5871 | -2.3 |
| GADD45G | 10912 | 2.4 | FCHO1 | 23149 | -2.3 |
| KLF6 | 1316 | 2.4 | LOC644450 | 644450 | -2.3 |
| MORC3 | 23515 | 2.4 | UBAC1 | 10422 | -2.3 |
| TUBA8 | 51807 | 2.4 | TENC1 | 23371 | -2.3 |
| VEGFA | 7422 | 2.4 | TREX1 | 11277 | -2.3 |
| EFNB2 | 1948 | 2.4 | PTPN18 | 26469 | -2.3 |
| MOSPD1 | 56180 | 2.4 | RBBP9 | 10741 | -2.3 |
| GPLY | 10578 | 2.4 | MYH10 | 4628 | -2.3 |
| C6orf35 | 729515 | 2.4 | RGS14 | 10636 | -2.3 |
| RBBP6 | 5930 | 2.4 | PLCH1 | 23007 | -2.3 |
| GDF15 | 9518 | 2.4 | SLC9A3R2 | 9351 | -2.3 |
| RRAD | 6236 | 2.4 | APITD1 | 378708 | -2.3 |
| DDX3Y | 8653 | 2.4 | CPOX | 1371 | -2.3 |
| TUBA3C | 7278 | 2.4 | ZDHHC6 | 64429 | -2.3 |
| CRY2 | 1408 | 2.4 | PACS2 | 23241 | -2.3 |
| TOP1 | 7150 | 2.4 | RPL23AP32 | 56969 | -2.3 |
| NFAT5 | 10725 | 2.4 | INTS3 | 65123 | -2.3 |
| CCKBR | 887 | 2.4 | NRG2 | 9542 | -2.3 |
| ROR1 | 4919 | 2.4 | NT5M | 56953 | -2.3 |
| CLDN1 | 9076 | 2.4 | ITPKB | 3707 | -2.3 |
| SSH1 | 54434 | 2.4 | RSAD1 | 55316 | -2.2 |
| C1orf63 | 57035 | 2.4 | PTDSS1 | 9791 | -2.2 |
| TERF2IP | 54386 | 2.4 | NAT1 | 9 | -2.2 |
| FOXD3 | 27022 | 2.3 | NEURL | 9148 | -2.2 |
| TUFT1 | 7286 | 2.3 | PIK3R2 | 5296 | -2.2 |

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| ABL2 | 27 | 2.3 | SUOX | 6821 | -2.2 |
| ID4 | 3400 | 2.3 | RGS10 | 6001 | -2.2 |
| TNFRSF10B | 8795 | 2.3 | ZNF839 | 55778 | -2.2 |
| OTUD3 | 23252 | 2.3 | RGS19 | 10287 | -2.2 |
| GPRC5B | 51704 | 2.3 | MPST | 4357 | -2.2 |
| KIAA0895 | 23366 | 2.3 | PCYOX1L | 78991 | -2.2 |
| AKAP12 | 9590 | 2.3 | ACADSB | 36 | -2.2 |
| HMGCS1 | 3157 | 2.3 | MRPS34 | 65993 | -2.2 |
| CRABP2 | 1382 | 2.3 | CUL9 | 23113 | -2.2 |
| PIM1 | 5292 | 2.3 | GSDMD | 79792 | -2.2 |
| HIVEP1 | 3096 | 2.3 | GAB2 | 9846 | -2.2 |
| RHBDF1 | 64285 | 2.3 | FLJ11710 | 79904 | -2.2 |
| STRN3 | 29966 | 2.3 | KAT2A | 2648 | -2.2 |
| TSC22D2 | 9819 | 2.3 | TUB | 7275 | -2.2 |
| AMOTL2 | 51421 | 2.3 | DGKG | 1608 | -2.2 |
| ARID3A | 1820 | 2.3 | LHX2 | 9355 | -2.2 |
| SLC35F2 | 54733 | 2.3 | TMEM143 | 55260 | -2.2 |
| SLC7A6 | 9057 | 2.3 | PDCD2 | 5134 | -2.2 |
| VPS37B | 79720 | 2.3 | FERMT1 | 55612 | -2.2 |
| ZFP36 | 7538 | 2.3 | FLJ11235 | 54508 | -2.2 |
| C1GALT1 | 56913 | 2.3 | DOK4 | 55715 | -2.2 |
| BTG1 | 694 | 2.3 | ARHGEF9 | 23229 | -2.2 |
| LONRF3 | 79836 | 2.2 | F12 | 2161 | -2.1 |
| CPEB3 | 22849 | 2.2 | UBE2D4 | 51619 | -2.1 |
| ZNF529 | 57711 | 2.2 | C8orf55 | 51337 | -2.1 |
| CDC42SE1 | 56882 | 2.2 | RWDD2B | 10069 | -2.1 |
| IRF1 | 3659 | 2.2 | PLD2 | 5338 | -2.1 |
| NR1D2 | 9975 | 2.2 | TUBBP5 | 643224 | -2.1 |
| THAP9 | 79725 | 2.2 | KIAA0100 | 9703 | -2.1 |
| DUSP6 | 1848 | 2.2 | RAB15 | 376267 | -2.1 |
| NEK7 | 140609 | 2.2 | ZCWPW1 | 55063 | -2.1 |

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| SCML2 | 10389 | 2.2 | TMC5 | 79838 | -2.1 |
| PRKAB1 | 5564 | 2.2 | OSBPL1A | 114876 | -2.1 |
| GABPB1 | 2553 | 2.2 | TBCD | 6904 | -2.1 |
| CXCL3 | 2921 | 2.2 | NARG2 | 79664 | -2.1 |
| C6orf145 | 221749 | 2.2 | CLDN3 | 1365 | -2.1 |
| CHIC2 | 26511 | 2.2 | AMDHD2 | 51005 | -2.1 |
| TEF | 7008 | 2.2 | F8A1 | 8263 | -2.1 |
| THAP1 | 55145 | 2.2 | GALNT4 | 8693 | -2.1 |
| UNC84B | 25777 | 2.2 | WDR4 | 10785 | -2.1 |
| F3 | 2152 | 2.2 | C19orf54 | 284325 | -2.1 |
| MAFK | 7975 | 2.2 | GIN54 | 84296 | -2.1 |
| SKIL | 6498 | 2.2 | FANCG | 2189 | -2.1 |
| UFM1 | 51569 | 2.2 | ARHGAP22 | 58504 | -2.1 |
| NPR2 | 4882 | 2.2 | BDH1 | 622 | -2.1 |
| CAPRIN2 | 65981 | 2.2 | XRCC1 | 7515 | -2.1 |
| RFPL3S | 10737 | 2.2 | SMARCD3 | 6604 | -2.1 |
| SNIP1 | 79753 | 2.2 | ANXA4 | 307 | -2.1 |
| FST | 10468 | 2.2 | CDON | 50937 | -2.1 |
| PPL | 5493 | 2.2 | CCDC71 | 64925 | -2.1 |
| PVR | 5817 | 2.2 | MLPH | 79083 | -2.1 |
| ZCCHC6 | 79670 | 2.2 | ETV6 | 2120 | -2.1 |
| ZEB2 | 9839 | 2.1 | C8orf51 | 78998 | -2.1 |
| TLR6 | 10333 | 2.1 | C14orf133 | 63894 | -2.1 |
| ZNF460 | 10794 | 2.1 | HOXB5 | 3215 | -2.1 |
| IP6K2 | 51447 | 2.1 | ZNF358 | 140467 | -2.1 |
| LINS1 | 55180 | 2.1 | ANKRD36B | 57730 | -2.1 |
| REV1 | 51455 | 2.1 | P2RY6 | 5031 | -2.0 |
| SLC38A2 | 54407 | 2.1 | PNPO | 55163 | -2.0 |
| IKZF5 | 64376 | 2.1 | ADCK2 | 90956 | -2.0 |
| CXCL2 | 2920 | 2.1 | CASP6 | 839 | -2.0 |
| CREB5 | 9586 | 2.1 | ECHDC2 | 55268 | -2.0 |

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| CLK4 | 57396 | 2.1 | C22orf36 | 388886 | -2.0 |
| CLK1 | 1195 | 2.1 | MAB21L2 | 10586 | -2.0 |
| TNNC2 | 7125 | 2.1 | RPP40 | 10799 | -2.0 |
| DCP1A | 55802 | 2.1 | MAP2K5 | 5607 | -2.0 |
| TBC1D15 | 64786 | 2.1 | ABCA7 | 10347 | -2.0 |
| WDR47 | 22911 | 2.1 | HMBS | 3145 | -2.0 |
| RIOK3 | 8780 | 2.1 | ARHGAP26 | 23092 | -2.0 |
| ABTB2 | 25841 | 2.1 | RAD51L3 | 5892 | -2.0 |
| HTR1A | 3350 | 2.1 | CHST12 | 55501 | -2.0 |
| FGFR1OP | 11116 | 2.1 | METTL13 | 51603 | -2.0 |
| SMURF2 | 64750 | 2.1 | EIF2B3 | 8891 | -2.0 |
| TNFRSF9 | 3604 | 2.1 | MAPT | 4137 | -2.0 |
| DDX10 | 1662 | 2.1 | LIG1 | 3978 | -2.0 |
| CSGALNACT2 | 55454 | 2.1 | IMPDH2 | 3615 | -2.0 |
| VNN2 | 8875 | 2.0 | PDK2 | 5164 | -2.0 |
| WBP4 | 11193 | 2.0 | PALB2 | 79728 | -2.0 |
| CTNNAL1 | 8727 | 2.0 | C9orf125 | 84302 | -2.0 |
| DCP2 | 167227 | 2.0 | MPP2 | 4355 | -2.0 |
| TDG | 6996 | 2.0 | B9D1 | 27077 | -2.0 |
| FSTL3 | 10272 | 2.0 | MREG | 55686 | -2.0 |
| YOD1 | 55432 | 2.0 | ALX1 | 8092 | -2.0 |
| ATAD2B | 54454 | 2.0 | QDPR | 5860 | -2.0 |
| CDCA4 | 55038 | 2.0 | UROS | 7390 | -2.0 |
| HIC2 | 23119 | 2.0 | PTPRA | 5786 | -2.0 |
| KIRREL | 55243 | 2.0 | JUP | 3728 | -2.0 |
| BTN2A1 | 11120 | 2.0 | POP5 | 51367 | -2.0 |
| PRPF38B | 55119 | 2.0 | ZNF688 | 146542 | -2.0 |
| MTSS1L | 92154 | 2.0 | AMACR | 23600 | -2.0 |
| JHDM1D | 80853 | 2.0 | N6AMT1 | 29104 | -2.0 |
| STX1A | 6804 | 2.0 | RFX5 | 5993 | -2.0 |
| SEMA3C | 10512 | 2.0 | MUC5B | 727897 | -2.0 |

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| TBC1D22B | 55633 | 2.0 |
| THUMPD2 | 80745 | 2.0 |
| SGPP1 | 81537 | 2.0 |
| FBXO3 | 26273 | 2.0 |
| CCNL2 | 81669 | 2.0 |
| EGFR | 1956 | 2.0 |
| TNFAIP2 | 7127 | 2.0 |
| COQ10B | 80219 | 2.0 |
| CCNH | 902 | 2.0 |
| SYNJ1 | 8867 | 2.0 |
| GOLGA8A | 23015 | 2.0 |
| SMG5 | 23381 | 2.0 |
| TIPARP | 25976 | 2.0 |
| FBXW7 | 55294 | 2.0 |
| BCL10 | 8915 | 2.0 |
| RAGE | 5891 | 2.0 |
| ZBTB11 | 27107 | 2.0 |
| INTS6 | 26512 | 2.0 |
