Tabel 1: Initial highest scoring gene regions

| Gene ID | Chromosome Name | Region start | Region stop | Score |
| --- | --- | --- | --- | --- |
| ATP5O | chr21 | 35275000 | 35324999 | 6.8 |
| ACVR1C | chr2 | 158375000 | 158524999 | 5.7 |
| CR1 | chr1 | 207650000 | 207699999 | 5.3 |
| CR2 | chr1 | 207650000 | 207699999 | 5.3 |
| S100A1 | chr1 | 153600000 | 153649999 | 5.3 |
| GAPDH | chr12 | 6625000 | 6674999 | 5.2 |
| TLR1 | chr4 | 38825000 | 38874999 | 5.2 |
| TLR6 | chr4 | 38825000 | 38874999 | 5.2 |
| NCAPD2 | chr12 | 6625000 | 6674999 | 5.2 |
| IFFO1 | chr12 | 6625000 | 6674999 | 5.2 |
| S100A13 | chr1 | 153600000 | 153649999 | 5.2 |
| CHTOP | chr1 | 153600000 | 153649999 | 5.1 |
| RHOT1 | chr17 | 30550000 | 30599999 | 4.9 |
| ATM | chr11 | 108150000 | 108199999 | 4.7 |
| GLULP4 | chr9 | 34900000 | 34949999 | 4.6 |
| YWHAZP6 | chr9 | 34900000 | 34949999 | 4.6 |
| DDX50 | chr10 | 70650000 | 70699999 | 4.5 |
| STOX1 | chr10 | 70650000 | 70699999 | 4.5 |
| ATP8A1 | chr4 | 42400000 | 42449999 | 4.4 |
| IQGAP1 | chr15 | 90925000 | 90974999 | 4.4 |
| RAD23B | chr9 | 110025000 | 110074999 | 4.4 |
| SHISA3 | chr4 | 42400000 | 42449999 | 4.4 |
| FAM13A | chr4 | 89650000 | 89999999 | 4.3 |
| HADH | chr4 | 108900000 | 108949999 | 4.3 |
| LSAMP | chr3 | 115850000 | 115899999 | 4.3 |
| NIPAL2 | chr8 | 99300000 | 99349999 | 4.3 |
| CEPT1 | chr1 | 111675000 | 111724999 | 4.2 |
| CUEDC2 | chr10 | 104175000 | 104224999 | 4.2 |
| DAPK2 | chr15 | 64200000 | 64249999 | 4.2 |
| DRAM2 | chr1 | 111675000 | 111724999 | 4.2 |
| ETV6 | chr12 | 11875000 | 11924999 | 4.2 |
| FAM13A-AS1 | chr4 | 89650000 | 89699999 | 4.2 |
| FBXL15 | chr10 | 104175000 | 104224999 | 4.2 |
| MIR146B | chr10 | 104175000 | 104224999 | 4.2 |
| PFKFB3 | chr10 | 6175000 | 6324999 | 4.2 |
| PSD | chr10 | 104175000 | 104224999 | 4.2 |
| ADCK3 | chr1 | 227175000 | 227224999 | 4.1 |
| ARHGEF26 | chr3 | 153950000 | 153999999 | 4.1 |
| CDC42BPA | chr1 | 227175000 | 227224999 | 4.1 |
| RAPGEF2 | chr4 | 160275000 | 160324999 | 4.1 |
| AIF1 | chr6 | 31575000 | 31624999 | 4.0 |
| CNKSR3 | chr6 | 154725000 | 154774999 | 4.0 |
| GOLGA8IP | chr15 | 23250000 | 23299999 | 4.0 |
| GRM8 | chr7 | 126350000 | 126399999 | 4.0 |
| IGSF10 | chr3 | 151150000 | 151199999 | 4.0 |
| IRS2 | chr13 | 110400000 | 110449999 | 4.0 |
| MED12L | chr3 | 151150000 | 151199999 | 4.0 |
| PRRC2A | chr6 | 31575000 | 31624999 | 4.0 |
| PTPN4 | chr2 | 120725000 | 120774999 | 4.0 |
| SLC4A4 | chr4 | 72425000 | 72474999 | 4.0 |
| SNORA38 | chr6 | 31575000 | 31624999 | 4.0 |
| TXNL1 | chr18 | 54275000 | 54349999 | 4.0 |
| UQCRHP1 | chr6 | 31575000 | 31624999 | 4.0 |
| WDR7 | chr18 | 54300000 | 54349999 | 4.0 |
| C2 | chr6 | 31875000 | 31924999 | 3.9 |
| CFB | chr6 | 31875000 | 31924999 | 3.9 |
| ECHDC2 | chr1 | 53375000 | 53424999 | 3.9 |
| EGFL6 | chrX | 13600000 | 13649999 | 3.9 |
| MIR1273F | chr1 | 53375000 | 53424999 | 3.9 |
| RAB31 | chr18 | 9725000 | 9774999 | 3.9 |
| SCP2 | chr1 | 53375000 | 53424999 | 3.9 |
| SORBS2 | chr4 | 186775000 | 186824999 | 3.9 |
| CBX5 | chr12 | 54650000 | 54699999 | 3.8 |
| DHX15 | chr4 | 24525000 | 24574999 | 3.8 |
| DTNA | chr18 | 32425000 | 32474999 | 3.8 |
| FLT1 | chr13 | 28875000 | 28924999 | 3.8 |
| HNRNPA1 | chr12 | 54650000 | 54699999 | 3.8 |
| LUC7L2 | chr7 | 139075000 | 139124999 | 3.8 |
| MAOB | chrX | 43675000 | 43724999 | 3.8 |
| MIR3155A | chr10 | 6175000 | 6224999 | 3.8 |
| PECR | chr2 | 216900000 | 216949999 | 3.8 |

Table 2: Results genomic and all data (2:1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gene Name | Chromosome Name | Region start | Region stop | Score |
| ACVR1C | chr2 | 158400000 | 158524999 | 6.1 |
| C1orf189 | chr1 | 154150000 | 154199999 | 6.1 |
| MIR190B | chr1 | 154150000 | 154199999 | 6.1 |
| TPM3 | chr1 | 154150000 | 154199999 | 6.1 |
| ATP5O | chr21 | 35275000 | 35324999 | 5.2 |
| MIR151A | chr8 | 141725000 | 141774999 | 5.2 |
| PTK2 | chr8 | 141725000 | 141774999 | 5.2 |
| CALM1 | chr14 | 90850000 | 90899999 | 4.7 |
| GULP1 | chr2 | 189150000 | 189199999 | 4.6 |
| KCNRG | chr13 | 50575000 | 50624999 | 4.6 |
| MCCC1 | chr3 | 182775000 | 182824999 | 4.6 |
| MIR561 | chr2 | 189150000 | 189199999 | 4.6 |
| TRIM13 | chr13 | 50575000 | 50624999 | 4.6 |
| NR2C1 | chr12 | 95425000 | 95474999 | 4.5 |
| ATF2 | chr2 | 176025000 | 176074999 | 4.4 |
| ATP5G3 | chr2 | 176025000 | 176074999 | 4.4 |
| MIR933 | chr2 | 176025000 | 176074999 | 4.4 |
| PDIA5 | chr3 | 122925000 | 122974999 | 4.4 |
| SEC22A | chr3 | 122925000 | 122974999 | 4.4 |
| CA6 | chr1 | 9000000 | 9049999 | 4.3 |
| PTH2R | chr2 | 209300000 | 209349999 | 4.3 |
| ACACB | chr12 | 109675000 | 109724999 | 4.2 |
| ANXA3 | chr4 | 79525000 | 79574999 | 4.2 |
| GAPDH | chr12 | 6625000 | 6674999 | 4.2 |
| IFFO1 | chr12 | 6625000 | 6674999 | 4.2 |
| MYO5A | chr15 | 52575000 | 52624999 | 4.2 |
| MYO5C | chr15 | 52575000 | 52624999 | 4.2 |
| NCAPD2 | chr12 | 6625000 | 6674999 | 4.2 |
| BACH2 | chr6 | 90900000 | 90949999 | 4.1 |
| CPNE4 | chr3 | 131475000 | 131524999 | 4.1 |
| LMBR1L | chr12 | 49500000 | 49549999 | 4.1 |
| TUBA1B | chr12 | 49500000 | 49549999 | 4.1 |
| CYP39A1 | chr6 | 46600000 | 46649999 | 4.0 |
| DMD | chrX | 31325000 | 31374999 | 4.0 |
| DMD-AS2 | chrX | 31325000 | 31374999 | 4.0 |
| SLC25A27 | chr6 | 46600000 | 46649999 | 4.0 |
| AASS | chr7 | 121725000 | 121774999 | 3.9 |
| ANKRD32 | chr5 | 94025000 | 94074999 | 3.9 |
| BIRC2 | chr11 | 102200000 | 102249999 | 3.9 |
| BIRC3 | chr11 | 102200000 | 102249999 | 3.9 |
| FAM13B | chr5 | 137325000 | 137374999 | 3.9 |
| FGF2 | chr4 | 123725000 | 123774999 | 3.9 |
| MCTP1 | chr5 | 94025000 | 94074999 | 3.9 |
| AIF1 | chr6 | 31575000 | 31624999 | 3.8 |
| DAPK2 | chr15 | 64200000 | 64249999 | 3.8 |
| PANX1 | chr11 | 93875000 | 93924999 | 3.8 |
| PRRC2A | chr6 | 31575000 | 31624999 | 3.8 |
| SNORA38 | chr6 | 31575000 | 31624999 | 3.8 |
| UQCRHP1 | chr6 | 31575000 | 31624999 | 3.8 |

Table 3: Results transcriptomic and all data (2:1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gene Name | Chromosome Name | Region start | Region stop | Score |
| ATP5O | chr21 | 35275000 | 35324999 | 7.1 |
| ACVR1C | chr2 | 158375000 | 158524999 | 6.8 |
| GAPDH | chr12 | 6625000 | 6674999 | 6.2 |
| IFFO1 | chr12 | 6625000 | 6674999 | 6.2 |
| NCAPD2 | chr12 | 6625000 | 6674999 | 6.2 |
| ETV6 | chr12 | 11800000 | 12074999 | 5.8 |
| HADH | chr4 | 108900000 | 108999999 | 5.8 |
| TXNL1 | chr18 | 54275000 | 54349999 | 5.3 |
| ATM | chr11 | 108075000 | 108274999 | 5.2 |
| NPAT | chr11 | 108075000 | 108124999 | 5.2 |
| ATP8A1 | chr4 | 42400000 | 42449999 | 4.9 |
| FAU | chr11 | 64875000 | 64924999 | 4.9 |
| PKD2 | chr4 | 88925000 | 89024999 | 4.9 |
| SHISA3 | chr4 | 42400000 | 42449999 | 4.9 |
| SYVN1 | chr11 | 64875000 | 64924999 | 4.9 |
| TM7SF2 | chr11 | 64875000 | 64924999 | 4.9 |
| VPS51 | chr11 | 64875000 | 64924999 | 4.9 |
| WDR7 | chr18 | 54300000 | 54349999 | 4.9 |
| GLULP4 | chr9 | 34900000 | 34949999 | 4.8 |
| YWHAZP6 | chr9 | 34900000 | 34949999 | 4.8 |
| ZNHIT2 | chr11 | 64875000 | 64924999 | 4.8 |
| AIF1 | chr6 | 31575000 | 31624999 | 4.7 |
| PRRC2A | chr6 | 31575000 | 31624999 | 4.7 |
| SNORA38 | chr6 | 31575000 | 31624999 | 4.7 |
| UQCRHP1 | chr6 | 31575000 | 31624999 | 4.7 |
| CHTOP | chr1 | 153600000 | 153649999 | 4.6 |
| LEF1 | chr4 | 108950000 | 108999999 | 4.6 |
| S100A1 | chr1 | 153600000 | 153649999 | 4.6 |
| S100A13 | chr1 | 153600000 | 153649999 | 4.6 |
| CCDC64B | chr16 | 3075000 | 3124999 | 4.5 |
| DAPK2 | chr15 | 64200000 | 64274999 | 4.5 |
| GPD1L | chr3 | 32125000 | 32224999 | 4.5 |
| HPS1 | chr10 | 100175000 | 100224999 | 4.5 |
| MIR4685 | chr10 | 100175000 | 100224999 | 4.5 |
| MMP25 | chr16 | 3075000 | 3124999 | 4.5 |
| PFKFB3 | chr10 | 6225000 | 6324999 | 4.5 |
| RHOT1 | chr17 | 30550000 | 30599999 | 4.5 |
| THOC6 | chr16 | 3075000 | 3124999 | 4.5 |
| C11orf65 | chr11 | 108200000 | 108274999 | 4.4 |
| ADSSL1 | chr14 | 105175000 | 105249999 | 4.3 |
| BEST1 | chr11 | 61725000 | 61774999 | 4.3 |
| COPZ1 | chr12 | 54675000 | 54724999 | 4.3 |
| FTH1 | chr11 | 61725000 | 61774999 | 4.3 |
| HNRNPA1 | chr12 | 54650000 | 54724999 | 4.3 |
| MRPL49 | chr11 | 64875000 | 64924999 | 4.3 |
| NFE2 | chr12 | 54675000 | 54724999 | 4.3 |
| SIVA1 | chr14 | 105200000 | 105249999 | 4.3 |
| ACACB | chr12 | 109700000 | 109749999 | 4.2 |
| ACVR1 | chr2 | 158625000 | 158724999 | 4.2 |
| CBX5 | chr12 | 54650000 | 54699999 | 4.2 |
| CIDEA | chr18 | 12250000 | 12324999 | 4.2 |
| DDX50 | chr10 | 70650000 | 70699999 | 4.2 |
| DHX15 | chr4 | 24550000 | 24624999 | 4.2 |
| FAM13A | chr4 | 89650000 | 89999999 | 4.2 |
| FAM13A-AS1 | chr4 | 89650000 | 89699999 | 4.2 |
| FOXN4 | chr12 | 109700000 | 109749999 | 4.2 |
| PDE4DIP | chr1 | 144975000 | 145124999 | 4.2 |
| SEC22B | chr1 | 145075000 | 145124999 | 4.2 |
| STOX1 | chr10 | 70625000 | 70699999 | 4.2 |
| ARID3C | chr9 | 34625000 | 34674999 | 4.1 |
| DCN | chr12 | 91550000 | 91599999 | 4.1 |
| EGFL6 | chrX | 13575000 | 13674999 | 4.1 |
| F11 | chr4 | 187175000 | 187224999 | 4.1 |
| GALT | chr9 | 34625000 | 34674999 | 4.1 |
| GATAD2A | chr19 | 19525000 | 19574999 | 4.1 |
| IRS2 | chr13 | 110400000 | 110449999 | 4.1 |
| KLKB1 | chr4 | 187175000 | 187224999 | 4.1 |
| MASP2 | chr1 | 11075000 | 11124999 | 4.1 |
| MIR640 | chr19 | 19525000 | 19574999 | 4.1 |
| MYO5A | chr15 | 52575000 | 52624999 | 4.1 |
| MYO5C | chr15 | 52575000 | 52624999 | 4.1 |
| RPL30P15 | chrX | 13575000 | 13624999 | 4.1 |
| SIGMAR1 | chr9 | 34625000 | 34674999 | 4.1 |
| TARDBP | chr1 | 11075000 | 11124999 | 4.1 |
| ADORA1 | chr1 | 203050000 | 203099999 | 4.0 |
| AGPAT5 | chr8 | 6600000 | 6649999 | 4.0 |
| ANG | chr14 | 21150000 | 21199999 | 4.0 |
| ATP6V1B1 | chr2 | 71150000 | 71199999 | 4.0 |
| BLOC1S1 | chr12 | 56100000 | 56149999 | 4.0 |
| CD63 | chr12 | 56100000 | 56149999 | 4.0 |
| CRLS1 | chr20 | 5975000 | 6024999 | 4.0 |
| DIMT1 | chr5 | 61675000 | 61724999 | 4.0 |
| FAM102B | chr1 | 109100000 | 109149999 | 4.0 |
| INF2 | chr14 | 105175000 | 105224999 | 4.0 |
| IPO11 | chr5 | 61675000 | 61724999 | 4.0 |
| ITGA7 | chr12 | 56100000 | 56149999 | 4.0 |
| KIF2A | chr5 | 61675000 | 61724999 | 4.0 |
| MCM8 | chr20 | 5975000 | 6024999 | 4.0 |
| MIR4659A | chr8 | 6600000 | 6649999 | 4.0 |
| MIR4659B | chr8 | 6600000 | 6649999 | 4.0 |
| MYOG | chr1 | 203050000 | 203099999 | 4.0 |
| MYOZ3 | chr5 | 150025000 | 150074999 | 4.0 |
| PDIA5 | chr3 | 122925000 | 122974999 | 4.0 |
| RAD23B | chr9 | 110075000 | 110124999 | 4.0 |
| RDH5 | chr12 | 56100000 | 56149999 | 4.0 |
| RNASE4 | chr14 | 21150000 | 21199999 | 4.0 |
| SEC22A | chr3 | 122925000 | 122999999 | 4.0 |
| SLC24A6 | chr12 | 113725000 | 113774999 | 4.0 |
| SLC8A1 | chr2 | 40475000 | 40524999 | 4.0 |
| SLC8A1-AS1 | chr2 | 40475000 | 40524999 | 4.0 |
| SYNPO | chr5 | 150025000 | 150074999 | 4.0 |
| TNMD | chrX | 99825000 | 99899999 | 4.0 |
| TPCN1 | chr12 | 113725000 | 113774999 | 4.0 |
| VAX2 | chr2 | 71150000 | 71199999 | 4.0 |
| ADAM9 | chr8 | 38850000 | 38899999 | 3.9 |
| BMP2K | chr4 | 79750000 | 79799999 | 3.9 |
| ERGIC2 | chr12 | 29475000 | 29524999 | 3.9 |
| FAR2 | chr12 | 29475000 | 29524999 | 3.9 |
| FGF2 | chr4 | 123775000 | 123824999 | 3.9 |
| GLUL | chr1 | 182350000 | 182399999 | 3.9 |
| LSAMP | chr3 | 115575000 | 116049999 | 3.9 |
| MAOB | chrX | 43675000 | 43724999 | 3.9 |
| MIR208B | chr14 | 23875000 | 23924999 | 3.9 |
| MYH6 | chr14 | 23875000 | 23924999 | 3.9 |
| MYH7 | chr14 | 23875000 | 23924999 | 3.9 |
| NFAT5 | chr16 | 69725000 | 69774999 | 3.9 |
| NQO1 | chr16 | 69725000 | 69774999 | 3.9 |
| OSBPL11 | chr3 | 125225000 | 125274999 | 3.9 |
| PYGM | chr11 | 64500000 | 64549999 | 3.9 |
| RASGRP2 | chr11 | 64500000 | 64549999 | 3.9 |
| RNASEH1 | chr2 | 3600000 | 3649999 | 3.9 |
| RPS7 | chr2 | 3600000 | 3649999 | 3.9 |
| SNX4 | chr3 | 125225000 | 125274999 | 3.9 |
| TM2D2 | chr8 | 38850000 | 38899999 | 3.9 |
| CR1 | chr1 | 207725000 | 207774999 | 3.8 |
| DUSP14 | chr17 | 35850000 | 35899999 | 3.8 |
| PALLD | chr4 | 169725000 | 169774999 | 3.8 |
| SC5DL | chr11 | 121150000 | 121199999 | 3.8 |
| SEC61A2 | chr10 | 12175000 | 12224999 | 3.8 |
| SYNRG | chr17 | 35850000 | 35899999 | 3.8 |
| TEDDM1 | chr1 | 182350000 | 182399999 | 3.8 |
| ADH1B | chr4 | 100225000 | 100274999 | 4.1 |

Table 4: Results proteomic and all data (2:1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gene Name | Chromosome Name | Region start | Region stop | Score |
| RAP2B | chr3 | 152875000 | 152924999 | 5.2 |
| ACVR1C | chr2 | 158400000 | 158499999 | 5.0 |
| ETV6 | chr12 | 11800000 | 11849999 | 4.9 |
| ATP6V1B1 | chr2 | 71150000 | 71199999 | 4.8 |
| VAX2 | chr2 | 71150000 | 71199999 | 4.8 |
| E2F4 | chr16 | 67225000 | 67274999 | 4.7 |
| ELMO3 | chr16 | 67225000 | 67274999 | 4.7 |
| LRRC29 | chr16 | 67225000 | 67274999 | 4.7 |
| MIR328 | chr16 | 67225000 | 67274999 | 4.7 |
| TNMD | chrX | 99850000 | 99899999 | 4.7 |
| EEF1A2 | chr20 | 62100000 | 62149999 | 4.6 |
| KCNQ2 | chr20 | 62100000 | 62149999 | 4.6 |
| NDUFAF1 | chr15 | 41675000 | 41724999 | 4.6 |
| ATP5O | chr21 | 35275000 | 35324999 | 4.5 |
| HOXB-AS4 | chr17 | 46700000 | 46749999 | 4.5 |
| HOXB9 | chr17 | 46700000 | 46749999 | 4.5 |
| MIR151A | chr8 | 141725000 | 141774999 | 4.5 |
| MIR196A1 | chr17 | 46700000 | 46749999 | 4.5 |
| PHEX | chrX | 22075000 | 22124999 | 4.5 |
| PTK2 | chr8 | 141725000 | 141774999 | 4.5 |
| GAPDH | chr12 | 6625000 | 6674999 | 4.3 |
| IFFO1 | chr12 | 6625000 | 6674999 | 4.3 |
| NCAPD2 | chr12 | 6625000 | 6674999 | 4.3 |
| ACSS3 | chr12 | 81475000 | 81524999 | 4.2 |
| ATM | chr11 | 108225000 | 108274999 | 4.2 |
| C11orf65 | chr11 | 108225000 | 108274999 | 4.2 |
| C1orf189 | chr1 | 154150000 | 154199999 | 4.2 |
| MFAP3 | chr5 | 153425000 | 153474999 | 4.2 |
| MIR190B | chr1 | 154150000 | 154199999 | 4.2 |
| MIR378A | chr5 | 149100000 | 149149999 | 4.2 |
| PPARGC1B | chr5 | 149100000 | 149149999 | 4.2 |
| TPM3 | chr1 | 154150000 | 154199999 | 4.2 |
| ADAM9 | chr8 | 38875000 | 38924999 | 4.1 |
| COL14A1 | chr8 | 121250000 | 121299999 | 4.1 |
| G3BP1 | chr5 | 151175000 | 151224999 | 4.1 |
| HEYL | chr1 | 40100000 | 40149999 | 4.0 |
| NT5C1A | chr1 | 40100000 | 40149999 | 4.0 |
| CHTOP | chr1 | 153600000 | 153649999 | 3.9 |
| GPATCH2 | chr1 | 217800000 | 217849999 | 3.9 |
| HNRNPA1 | chr12 | 54675000 | 54724999 | 3.9 |
| MIR143 | chr5 | 148800000 | 148849999 | 3.9 |
| MIR143HG | chr5 | 148800000 | 148849999 | 3.9 |
| MIR145 | chr5 | 148800000 | 148849999 | 3.9 |
| S100A1 | chr1 | 153600000 | 153649999 | 3.9 |
| S100A13 | chr1 | 153600000 | 153649999 | 3.9 |
| SNORD12 | chr20 | 47875000 | 47924999 | 3.9 |
| SNORD12B | chr20 | 47875000 | 47924999 | 3.9 |
| SNORD12C | chr20 | 47875000 | 47924999 | 3.9 |
| SPATA17 | chr1 | 217800000 | 217849999 | 3.9 |
| YWHAZP6 | chr9 | 34900000 | 34949999 | 3.9 |
| ZNFX1 | chr20 | 47875000 | 47924999 | 3.9 |
| ZNFX1-AS1 | chr20 | 47875000 | 47924999 | 3.9 |
| ABCF1 | chr6 | 30550000 | 30599999 | 3.8 |
| ABCF1 | chr6 | 30550000 | 30599999 | 3.8 |
| COPZ1 | chr12 | 54675000 | 54724999 | 3.8 |
| EPS15 | chr1 | 51975000 | 52024999 | 3.8 |
| GLULP4 | chr9 | 34900000 | 34949999 | 3.8 |
| IARS2 | chr1 | 220275000 | 220324999 | 3.8 |
| MIR194-1 | chr1 | 220275000 | 220324999 | 3.8 |
| MIR215 | chr1 | 220275000 | 220324999 | 3.8 |
| MIR877 | chr6 | 30550000 | 30599999 | 3.8 |
| NFE2 | chr12 | 54675000 | 54724999 | 3.8 |
| PPP1R10 | chr6 | 30550000 | 30599999 | 3.8 |

Table 5: Results microRNA and all data (2:1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gene Name | Chromosome Name | Region start | Region stop | Score |
| ATP5O | chr21 | 35275000 | 35324999 | 6.1 |
| CDCP1 | chr3 | 45175000 | 45224999 | 5.3 |
| GAPDH | chr12 | 6625000 | 6674999 | 5.3 |
| IFFO1 | chr12 | 6625000 | 6674999 | 5.3 |
| NCAPD2 | chr12 | 6625000 | 6674999 | 5.3 |
| RAB21 | chr12 | 72175000 | 72224999 | 5.3 |
| BTK | chrX | 100625000 | 100674999 | 5.2 |
| RPL36A | chrX | 100625000 | 100674999 | 5.2 |
| GATAD2A | chr19 | 19525000 | 19574999 | 5.0 |
| MIR640 | chr19 | 19525000 | 19574999 | 5.0 |
| OXSR1 | chr3 | 38250000 | 38299999 | 5.0 |
| ADH1B | chr4 | 100225000 | 100274999 | 4.9 |
| CD99 | chrX | 2600000 | 2649999 | 4.7 |
| EYA4 | chr6 | 133700000 | 133749999 | 4.7 |
| FAM227B | chr15 | 49725000 | 49774999 | 4.7 |
| FGF7 | chr15 | 49725000 | 49774999 | 4.7 |
| SOX5 | chr12 | 24075000 | 24124999 | 4.7 |
| ACVR1C | chr2 | 158425000 | 158499999 | 4.6 |
| ABCC1 | chr16 | 16225000 | 16274999 | 4.4 |
| ABCC6 | chr16 | 16225000 | 16274999 | 4.4 |
| ANGPT1 | chr8 | 108275000 | 108324999 | 4.4 |
| MAOB | chrX | 43675000 | 43724999 | 4.4 |
| PFKFB4 | chr3 | 48575000 | 48624999 | 4.4 |
| UCN2 | chr3 | 48575000 | 48624999 | 4.4 |
| PDE4DIP | chr1 | 144950000 | 144999999 | 4.2 |
| VBP1 | chrX | 154450000 | 154499999 | 4.2 |
| DDX50 | chr10 | 70650000 | 70699999 | 4.1 |
| FAM49B | chr8 | 130950000 | 130999999 | 4.1 |
| LRP1B | chr2 | 141800000 | 141849999 | 4.1 |
| RELN | chr7 | 103575000 | 103624999 | 4.1 |
| STOX1 | chr10 | 70650000 | 70699999 | 4.1 |
| C8orf74 | chr8 | 10525000 | 10574999 | 3.9 |
| CHST15 | chr10 | 125850000 | 125899999 | 3.9 |
| CYB561 | chr17 | 61500000 | 61549999 | 3.9 |
| PRICKLE2 | chr3 | 64200000 | 64249999 | 3.9 |
| RNA5SP252 | chr8 | 10525000 | 10574999 | 3.9 |
| RP1L1 | chr8 | 10525000 | 10574999 | 3.9 |
| TANC2 | chr17 | 61500000 | 61549999 | 3.9 |
| RPL37A | chr2 | 217350000 | 217399999 | 3.8 |
| SCMH1 | chr1 | 41600000 | 41649999 | 3.8 |

Table 6: Results epigenetic and all data (2:1)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Gene Name | Chromosome Name | Region start | Region stop | Score |
| NDUFAF1 | chr15 | 41675000 | 41724999 | 5.6 |
| PTPRJ | chr11 | 48150000 | 48199999 | 4.8 |
| ATP5O | chr21 | 35275000 | 35324999 | 4.5 |
| ACVR1C | chr2 | 158425000 | 158499999 | 4.4 |
| KIAA1467 | chr12 | 13200000 | 13249999 | 4.4 |
| MAP3K5 | chr6 | 136975000 | 137024999 | 4.4 |
| PPP2R3A | chr3 | 135700000 | 135749999 | 4.4 |
| C11orf63 | chr11 | 122800000 | 122849999 | 4.2 |
| FAM13A | chr4 | 89700000 | 89749999 | 4.0 |
| GPD1L | chr3 | 32150000 | 32199999 | 4.0 |
| PBLD | chr10 | 70025000 | 70074999 | 4.0 |
| RAD23B | chr9 | 110075000 | 110124999 | 4.0 |
| RGS7 | chr1 | 240950000 | 240999999 | 4.0 |
| SNTG1 | chr8 | 51350000 | 51399999 | 4.0 |
| BAI3 | chr6 | 69875000 | 69924999 | 3.9 |
| BMP2K | chr4 | 79825000 | 79874999 | 3.9 |
| C12orf52 | chr12 | 113625000 | 113674999 | 3.9 |
| C16orf74 | chr16 | 85725000 | 85774999 | 3.9 |
| IQCD | chr12 | 113625000 | 113674999 | 3.9 |
| LSAMP | chr3 | 115650000 | 115699999 | 3.9 |
| PAQR3 | chr4 | 79825000 | 79874999 | 3.9 |
| SLC8A1 | chr2 | 40450000 | 40499999 | 3.9 |
| SLC8A1-AS1 | chr2 | 40450000 | 40499999 | 3.9 |
| DTNA | chr18 | 32350000 | 32399999 | 3.8 |