

Supplementary Figures and Tables

Figure S1. (A) Heat map displaying 526 DEGs derived from GSE14827 between metastasis and non-metastasis patients. **(B)** Heat map displaying 1057 DEGs derived from GSE39055 between recurrence and non-recurrence patients. Rows represent genes and columns represent patients. Red rectangles represent patients with metastasis or recurrence and blue rectangles represent patients without metastasis or recurrence.

Figure S2. (A) Dot plots of *PQBP1* and *PCK2* expression in 3 datasets. the red dots represented patients who died during the follow-up and the blue dots represented patients were alive during follow-up. **(B)** Density plots of *PQBP1* and *PCK2* expression in 3 datasets, the red lines represented expression distributions in patients who died during the follow-up, and the blue lines in patients were alive during follow-up, and the black lines in all patients. **(C)** Kaplan-Meier curves of *PQBP1*, *PCK2* expression status and combination status of them on overall survival in GSE21257.

Table S3. The intersected DEGs identified in 2 discovery datasets.

Table S4. Associations of *PCK2* and *PQBP1* expression status with clinicopathological features of OS patients in GSE14827, GSE39055 and GSE21257.

Table S5. Univariate and multivariate Cox regression analyses for overall survival of OS patients in GSE21257.

Figure S1

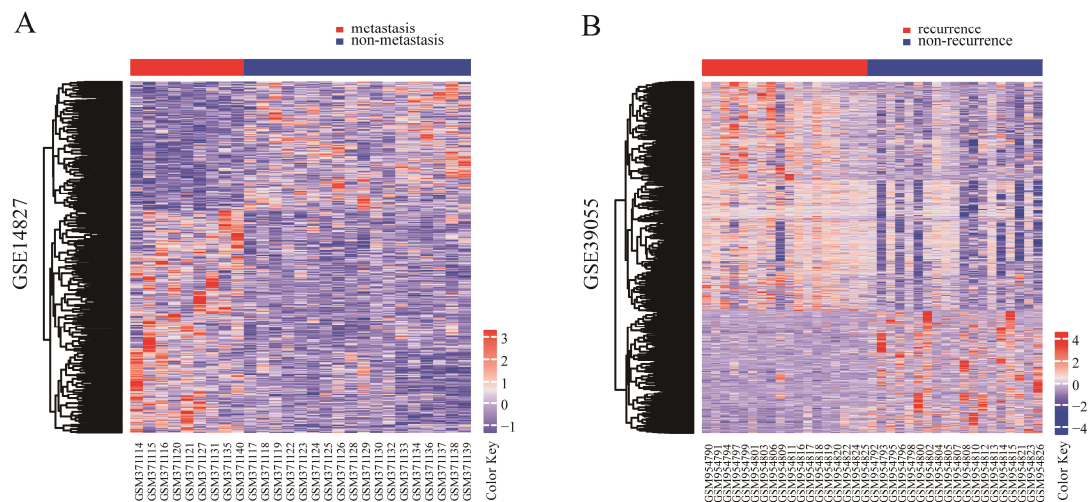


Figure S2

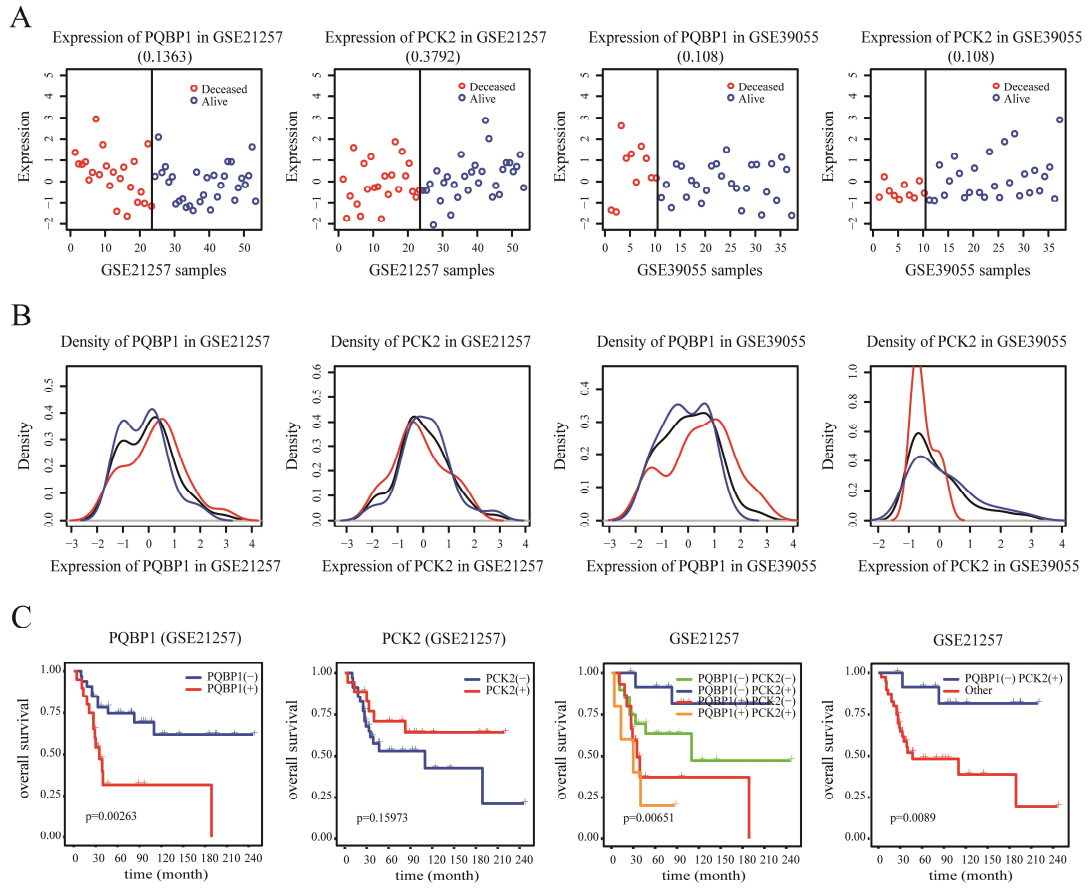


Table S3. The intersected DEGs identified in 2 discovery datasets.

| | GSE14827 | | | GSE39055 | |
|-----------------------|-------------|----------------|-------------|----------------|-------------|
| | Gene Symbol | <i>p</i> value | Fold Change | <i>p</i> value | Fold Change |
| Up-regulated | ASGR1 | 0.001184122 | 2.344428863 | 0.039400673 | 1.621460858 |
| | ZNF418 | 0.008362868 | 2.048398906 | 0.029164288 | 1.683903434 |
| | PQBP1 | 0.010592651 | 2.009417777 | 0.011665975 | 1.78699277 |
| | YWHAG | 0.02780412 | 1.841856602 | 0.030156542 | 1.661936912 |
| | MCFD2 | 0.028375148 | 1.838169242 | 0.016289345 | 1.749797028 |
| | NDRG3 | 0.028759176 | 1.835727082 | 0.04126033 | 1.597198135 |
| | LOC148413 | 0.029852465 | 1.828932956 | 0.010684294 | 1.781277993 |
| | ZNF493 | 0.03035195 | 1.82590372 | 0.046534399 | 1.581142865 |
| | CTSA | 0.032661511 | 1.812458611 | 0.013578435 | 1.748321554 |
| | NEATC3 | 0.03495004 | 1.799959184 | 0.034732705 | 1.625525952 |
| Down-regulated | PCK2 | 0.007474416 | 2.066659942 | 0.006597972 | 1.75661625 |
| | SCN2A | 0.025932494 | 1.854443918 | 0.039693221 | 1.513673588 |
| | SLC25A36 | 0.038205149 | 1.783398534 | 0.01848471 | 1.702186435 |

Table S4. Associations of *PCK2* and *PQBPI* expression status with clinicopathological features of OS patients in GSE14827, GSE39055 and GSE21257.

| Datasets and clinical factors | No. of cases | <i>PCK2</i> | | | <i>PQBPI</i> | | |
|----------------------------------|--------------|-------------|----------|----------------|--------------|----------|----------------|
| | | high(+) | χ^2 | <i>p</i> value | high(+) | χ^2 | <i>p</i> value |
| GSE14827 | | | | | | | |
| Age (years) | | | | | | | |
| <18 | 16 | 12 (75%) | 1.0934 | 0.2957 | 5 (31.25%) | 0.0495 | 0.8240 |
| ≥18 | 11 | 10 (90.91%) | | | 3 (27.27%) | | |
| Gender | | | | | | | |
| Male | 17 | 14 (82.35%) | 0.0231 | 0.8792 | 6 (35.29%) | 0.7064 | 0.4007 |
| Female | 10 | 8 (80%) | | | 2 (20%) | | |
| Histological subtype | | | | | | | |
| Osteoblastic | 21 | 17 (80.95%) | 0.0175 | 0.8947 | 6 (28.57%) | 0.0508 | 0.8218 |
| Others | 6 | 5 (83.33%) | | | 2 (33.33%) | | |
| Tumor site | | | | | | | |
| Tibia/Femur | 25 | 20 (80%) | 0.4909 | 0.4835 | 6 (24%) | 5.1300 | 0.0235 |
| Elsewhere | 2 | 2 (100%) | | | 2 (100%) | | |
| Chemotherapeutic response | | | | | | | |
| Good | 11 | 9 (81.82%) | 0.0014 | 0.9702 | 3 (27.27%) | 0.0495 | 0.8240 |
| Poor | 16 | 13 (81.25%) | | | 5 (31.25%) | | |
| GSE39055 | | | | | | | |
| Age(years) | | | | | | | |
| <18 | 33 | 11(33.33%) | 0.1131 | 0.7367 | 8 (24.24%) | 1.2372 | 0.2660 |
| ≥18 | 4 | 1 (25%) | | | 0 (0%) | | |
| Gender | | | | | | | |
| Male | 20 | 8 (40%) | 1.1376 | 0.2862 | 5 (25%) | 0.2932 | 0.5882 |
| Female | 17 | 4 (23.53%) | | | 3 (17.65%) | | |
| Tumor necrosis rate (%) | | | | | | | |
| <90 | 24 | 6 (25%) | 1.7219 | 0.1894 | 7 (29.17%) | 2.2946 | 0.1298 |
| ≥90 | 13 | 6 (46.15%) | | | 1 (7.69%) | | |
| GSE21257 | | | | | | | |
| Age(years) | | | | | | | |
| <18 | 34 | 12 (38.71%) | 0.0750 | 0.7842 | 15 (44.12%) | 1.644 | 0.1998 |
| ≥18 | 19 | 6 (37.5%) | | | 5 (26.32%) | | |
| Gender | | | | | | | |
| Male | 34 | 8 (23.53%) | 4.6028 | 0.0319 | 15 (44.12%) | 1.644 | 0.1998 |
| Female | 19 | 10 (52.63%) | | | 5 (26.32%) | | |
| Histological subtype | | | | | | | |
| Osteoblastic | 32 | 9 (28.13%) | 1.227 | 0.268 | 10 (31.25%) | 1.4459 | 0.2292 |
| Others | 21 | 9 (42.86%) | | | 10 (47.62%) | | |
| Tumor site* | | | | | | | |
| Tibia/Femur | 42 | 16 (38.1%) | 1.1685 | 0.2797 | 14 (33.33%) | 0.9676 | 0.3253 |
| Elsewhere | 10 | 2 (20%) | | | 5 (50%) | | |
| Tumor grade* | | | | | | | |

| | | | | | | | |
|-------|----|-------------|--------|--------|-------------|--------|--------|
| G1-G2 | 29 | 11 (37.93%) | 0.5210 | 0.4704 | 11 (37.93%) | 0.7987 | 0.3715 |
| G3-G4 | 18 | 6 (33.33%) | | | 6 (33.33%) | | |

* clinical information of some patients is not complete.

Bold text denotes $p < 0.05$

Table S5. Univariate and multivariate Cox regression analyses for overall survival of OS patients in GSE21257.

| Variables | | Univariate analysis | | | Multivariate analysis | | |
|-----------------------------|-----------------|---------------------|--------------|------------------|-----------------------|--------------|----------------|
| | | HR | 95%CI | <i>p</i> value | HR | 95%CI | <i>p</i> value |
| Gender | male vs. female | 1.403 | 0.588–3.348 | 0.446 | 1.277 | 0.417–3.906 | 0.668 |
| Age | low vs. high | 2.752 | 1.015–7.458 | 0.047 | 3.678 | 0.958–14.127 | 0.058 |
| Tumor site | femur | 1(reference) | | | 1(reference) | | |
| | fibula | 3.981e-08 | 0–Inf | 0.998 | 3.504e-08 | 0–Inf | 0.999 |
| | humerus | 2.535 | 0.871–7.381 | 0.088 | 7.419 | 1.416–38.862 | 0.018 |
| | tibia | 1.012 | 0.373–2.746 | 0.982 | 1.067 | 0.303–3.753 | 0.919 |
| | unknown | 1.278 | 0.157–10.429 | 0.819 | 1.205e+08 | 0–Inf | 0.998 |
| Histological subtype | chondroblastic | 1(reference) | | | 1(reference) | | |
| | fibroblastic | 0.186 | 0.021–1.683 | 0.134 | 9.737e-10 | 0–Inf | 0.998 |
| | osteoblastic | 0.487 | 0.158–1.502 | 0.211 | 0.456 | 0.107–1.939 | 0.288 |
| | other | 0.497 | 0.124–2.001 | 0.325 | 0.430 | 0.080–2.318 | 0.326 |
| Tumor grade | G1 | 1(reference) | | | 1(reference) | | |
| | G2 | 0.346 | 0.116–1.028 | 0.056 | 0.143 | 0.033–0.608 | 0.008 |
| | G3 | 0.246 | 0.072–0.838 | 0.025 | 0.127 | 0.025–0.653 | 0.014 |
| | G4 | 0.167 | 0.020–1.375 | 0.096 | 0.063 | 0.006–0.623 | 0.018 |
| | unknown | 0.826 | 0.239–2.859 | 0.763 | 0.621 | 0.125–3.082 | 0.560 |
| PCK2 | high vs. low | 0.514 | 0.201–1.317 | 0.166 | 0.360 | 0.105–1.215 | 0.099 |
| PQBPI | high vs. low | 3.41 | 1.46–7.964 | 4.593e-03 | 3.272 | 1.106–9.682 | 0.032 |

Bold text denotes $p < 0.05$

Table S1. Differentially expressed genes between OS patients who did and did not develop metastasi

| Gene | Symlp value | log2Ratio | Fold Chan; | direction |
|-----------|-------------|-----------|------------|--------------|
| AC139100 | 0.000499 | -1.29985 | 2.46203 | Up-regulated |
| RP11-533F | 0.000885 | -1.2539 | 2.384855 | Up-regulated |
| HSPH1 | 0.001062 | -1.23858 | 2.359669 | Up-regulated |
| CTB-119C | 0.00108 | -1.23715 | 2.35733 | Up-regulated |
| CDYL2 | 0.001146 | -1.23205 | 2.349012 | Up-regulated |
| ASGR1 | 0.001184 | -1.22924 | 2.344429 | Up-regulated |
| LOC33953 | 0.001836 | -1.19016 | 2.281779 | Up-regulated |
| ZNF157 | 0.001896 | -1.18722 | 2.277128 | Up-regulated |
| LINC0033 | 0.002019 | -1.1814 | 2.267974 | Up-regulated |
| MARS2 | 0.002237 | -1.1718 | 2.252926 | Up-regulated |
| ZNF492 | 0.00247 | -1.16239 | 2.238273 | Up-regulated |
| SUGT1P3 | 0.002983 | -1.14409 | 2.21007 | Up-regulated |
| HOMER1 | 0.00377 | -1.12067 | 2.174486 | Up-regulated |
| LOC1005C | 0.00418 | -1.11008 | 2.158572 | Up-regulated |
| ZNF254 | 0.004285 | -1.10751 | 2.154732 | Up-regulated |
| THAP11 | 0.004872 | -1.09408 | 2.134768 | Up-regulated |
| JMJD6 | 0.005156 | -1.08805 | 2.125871 | Up-regulated |
| LINC0086 | 0.005248 | -1.08616 | 2.123086 | Up-regulated |
| NIP7 | 0.005253 | -1.08606 | 2.122936 | Up-regulated |
| KARS | 0.006053 | -1.07074 | 2.100507 | Up-regulated |
| MOCS3 | 0.006098 | -1.06992 | 2.099323 | Up-regulated |
| TRIM46 | 0.006248 | -1.06726 | 2.095448 | Up-regulated |
| DAP3 | 0.006292 | -1.0665 | 2.094347 | Up-regulated |
| LOC10192 | 0.006354 | -1.06541 | 2.092764 | Up-regulated |
| PSMB6 | 0.006545 | -1.06214 | 2.08803 | Up-regulated |
| HSD17B10 | 0.006598 | -1.06125 | 2.086736 | Up-regulated |
| PHLPP2 | 0.006835 | -1.05733 | 2.081071 | Up-regulated |
| PANX1 | 0.00716 | -1.05215 | 2.073613 | Up-regulated |
| NDUFB3 | 0.007169 | -1.05199 | 2.07339 | Up-regulated |
| RP11-143F | 0.007257 | -1.05063 | 2.071431 | Up-regulated |
| GNL3L | 0.007426 | -1.04804 | 2.067721 | Up-regulated |
| AP1G1 | 0.007426 | -1.04804 | 2.067714 | Up-regulated |
| ELAVL2 | 0.007474 | -1.04731 | 2.066671 | Up-regulated |
| PNPT1 | 0.007561 | -1.046 | 2.064793 | Up-regulated |
| FAM96B | 0.007566 | -1.04593 | 2.064695 | Up-regulated |
| MRPL22 | 0.007999 | -1.03959 | 2.055648 | Up-regulated |
| ZNF418 | 0.008363 | -1.0345 | 2.048399 | Up-regulated |
| HSPA4 | 0.008399 | -1.034 | 2.047695 | Up-regulated |
| BX538226 | 0.008505 | -1.03255 | 2.045638 | Up-regulated |
| LOC64223 | 0.008595 | -1.03135 | 2.043932 | Up-regulated |
| RP11-443F | 0.008751 | -1.02926 | 2.040974 | Up-regulated |
| ASH1L-A5 | 0.008767 | -1.02904 | 2.040673 | Up-regulated |
| RP11-483C | 0.008927 | -1.02694 | 2.037705 | Up-regulated |
| POMP | 0.00893 | -1.02691 | 2.037654 | Up-regulated |
| PRKAR1A | 0.009298 | -1.0222 | 2.031007 | Up-regulated |
| HOTAIRM | 0.009359 | -1.02143 | 2.029932 | Up-regulated |
| ABI2 | 0.00955 | -1.01906 | 2.026596 | Up-regulated |
| PPID | 0.009799 | -1.01603 | 2.022349 | Up-regulated |
| TPTE2P5 | 0.010392 | -1.00907 | 2.012608 | Up-regulated |
| LOC10028 | 0.010406 | -1.0089 | 2.012379 | Up-regulated |
| CDH3 | 0.010421 | -1.00872 | 2.012131 | Up-regulated |
| SLC25A44 | 0.010504 | -1.00778 | 2.010812 | Up-regulated |
| COG4 | 0.01055 | -1.00726 | 2.010092 | Up-regulated |
| PQBP1 | 0.010593 | -1.00678 | 2.009418 | Up-regulated |

| | | | | |
|------------|----------|----------|----------|--------------|
| HSPE1 | 0.010606 | -1.00662 | 2.009204 | Up-regulated |
| FOXR1 | 0.010694 | -1.00564 | 2.007836 | Up-regulated |
| FAF2 | 0.010772 | -1.00477 | 2.00662 | Up-regulated |
| ZNRF2P1 | 0.011046 | -1.00174 | 2.00242 | Up-regulated |
| FASTKD2 | 0.011216 | -0.9999 | 1.999867 | Up-regulated |
| OR9A1P | 0.011243 | -0.99961 | 1.999463 | Up-regulated |
| HOTAIR | 0.011475 | -0.99715 | 1.996047 | Up-regulated |
| NOX4 | 0.011481 | -0.99708 | 1.995955 | Up-regulated |
| EPHX4 | 0.011573 | -0.99612 | 1.994627 | Up-regulated |
| TRIM61 | 0.011573 | -0.99612 | 1.994625 | Up-regulated |
| HUS1 | 0.011588 | -0.99596 | 1.994404 | Up-regulated |
| LINC0029 | 0.011613 | -0.99569 | 1.99404 | Up-regulated |
| RYR3 | 0.011849 | -0.99325 | 1.990663 | Up-regulated |
| LOC10192 | 0.012058 | -0.99111 | 1.98772 | Up-regulated |
| TFPI2 | 0.012459 | -0.9871 | 1.982202 | Up-regulated |
| INTS4 | 0.012613 | -0.9856 | 1.980133 | Up-regulated |
| SUMO1P2 | 0.012842 | -0.98338 | 1.977087 | Up-regulated |
| DNAJC7 | 0.012876 | -0.98306 | 1.976648 | Up-regulated |
| NELL1 | 0.012899 | -0.98283 | 1.976342 | Up-regulated |
| AP006216 | 0.012987 | -0.98199 | 1.97519 | Up-regulated |
| DEDD2 | 0.01304 | -0.98148 | 1.974495 | Up-regulated |
| LOC10192 | 0.013339 | -0.97867 | 1.970649 | Up-regulated |
| LOC10012 | 0.013835 | -0.97412 | 1.964447 | Up-regulated |
| LOC10106 | 0.013913 | -0.97342 | 1.963485 | Up-regulated |
| RRP36 | 0.013973 | -0.97288 | 1.962756 | Up-regulated |
| PARD6G- | 0.014374 | -0.96933 | 1.957929 | Up-regulated |
| DDX28 | 0.014634 | -0.96707 | 1.954862 | Up-regulated |
| KCND2 | 0.014707 | -0.96643 | 1.954004 | Up-regulated |
| CIRH1A | 0.014758 | -0.966 | 1.953418 | Up-regulated |
| BC035400 | 0.015052 | -0.9635 | 1.950034 | Up-regulated |
| C17orf62 | 0.015123 | -0.9629 | 1.94923 | Up-regulated |
| RP11-521C | 0.015309 | -0.96135 | 1.947127 | Up-regulated |
| C15orf32 | 0.015376 | -0.96079 | 1.946375 | Up-regulated |
| ATG4D | 0.015744 | -0.95777 | 1.942305 | Up-regulated |
| WDR55 | 0.015934 | -0.95623 | 1.940235 | Up-regulated |
| PPP1R3A | 0.016094 | -0.95495 | 1.938517 | Up-regulated |
| XKRY /// | 0.016274 | -0.95353 | 1.936599 | Up-regulated |
| DHODH | 0.016761 | -0.94972 | 1.931492 | Up-regulated |
| RP1-35C2 | 0.016778 | -0.94959 | 1.931321 | Up-regulated |
| UBAC2 | 0.016785 | -0.94953 | 1.931248 | Up-regulated |
| RP11-24P1 | 0.016814 | -0.94931 | 1.930946 | Up-regulated |
| STARD3N | 0.01761 | -0.9433 | 1.922926 | Up-regulated |
| TTY15 | 0.017728 | -0.94243 | 1.92176 | Up-regulated |
| FRG1 /// F | 0.017862 | -0.94145 | 1.920453 | Up-regulated |
| NRG3 | 0.017901 | -0.94116 | 1.920068 | Up-regulated |
| LOC1005C | 0.017931 | -0.94094 | 1.919776 | Up-regulated |
| LOC10192 | 0.0181 | -0.93971 | 1.918144 | Up-regulated |
| GPATCH4 | 0.018196 | -0.93901 | 1.917217 | Up-regulated |
| ETF1 | 0.018208 | -0.93893 | 1.91711 | Up-regulated |
| CNIH3 | 0.018457 | -0.93715 | 1.914739 | Up-regulated |
| SORCS1 | 0.018577 | -0.93629 | 1.913605 | Up-regulated |
| TXNL4A | 0.018618 | -0.936 | 1.913214 | Up-regulated |
| LOC10192 | 0.018654 | -0.93574 | 1.912877 | Up-regulated |
| STARD3 | 0.018752 | -0.93505 | 1.911961 | Up-regulated |
| SCAMP3 | 0.018992 | -0.93338 | 1.909742 | Up-regulated |
| TMEM217 | 0.019074 | -0.93281 | 1.908985 | Up-regulated |

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|------------|----------|----------|----------|--------------|
| SMYD4 | 0.019327 | -0.93106 | 1.906673 | Up-regulated |
| AV2S1A1 | 0.019779 | -0.92799 | 1.902619 | Up-regulated |
| LOC10272 | 0.019796 | -0.92787 | 1.902469 | Up-regulated |
| TMEM104 | 0.019864 | -0.92741 | 1.901861 | Up-regulated |
| AVL9 | 0.020063 | -0.92609 | 1.900116 | Up-regulated |
| IL24 | 0.020081 | -0.92597 | 1.899956 | Up-regulated |
| ZMIZ1-AS | 0.020295 | -0.92455 | 1.898087 | Up-regulated |
| LOC72873 | 0.020386 | -0.92395 | 1.897302 | Up-regulated |
| AC007362 | 0.020841 | -0.92098 | 1.893406 | Up-regulated |
| PIH1D2 | 0.020882 | -0.92072 | 1.89306 | Up-regulated |
| RP11-769C | 0.020987 | -0.92004 | 1.892173 | Up-regulated |
| LIFR-AS1 | 0.020999 | -0.91997 | 1.892073 | Up-regulated |
| SIGLEC1C | 0.021031 | -0.91976 | 1.891803 | Up-regulated |
| TAX1BP1 | 0.021627 | -0.91599 | 1.886862 | Up-regulated |
| HTR1F | 0.02163 | -0.91597 | 1.886841 | Up-regulated |
| CCT3 /// L | 0.021654 | -0.91582 | 1.886643 | Up-regulated |
| FNIP2 | 0.021749 | -0.91523 | 1.88587 | Up-regulated |
| STX18-AS | 0.021772 | -0.91509 | 1.885682 | Up-regulated |
| WDR12 | 0.022055 | -0.91333 | 1.883388 | Up-regulated |
| PSMB3 | 0.022137 | -0.91283 | 1.88273 | Up-regulated |
| PNO1 | 0.022211 | -0.91238 | 1.882142 | Up-regulated |
| TMCO6 | 0.023035 | -0.9074 | 1.87566 | Up-regulated |
| BC033241 | 0.023142 | -0.90676 | 1.874835 | Up-regulated |
| TIMM17B | 0.023306 | -0.9058 | 1.873578 | Up-regulated |
| TBC1D25 | 0.02389 | -0.90239 | 1.869156 | Up-regulated |
| CNTN5 | 0.023937 | -0.90212 | 1.868806 | Up-regulated |
| SLC50A1 | 0.024268 | -0.90022 | 1.866354 | Up-regulated |
| N4BP2L2 | 0.024368 | -0.89965 | 1.865613 | Up-regulated |
| HMGA1P2 | 0.024378 | -0.89959 | 1.865539 | Up-regulated |
| CDYL | 0.0244 | -0.89947 | 1.865381 | Up-regulated |
| ASIC4 | 0.024642 | -0.8981 | 1.863614 | Up-regulated |
| GGA3 | 0.024844 | -0.89697 | 1.862152 | Up-regulated |
| RIPK4 | 0.025106 | -0.89551 | 1.860266 | Up-regulated |
| RSPH1 | 0.025521 | -0.89322 | 1.857319 | Up-regulated |
| NUP93 | 0.025896 | -0.89119 | 1.854701 | Up-regulated |
| TRPC5OS | 0.025968 | -0.89079 | 1.854196 | Up-regulated |
| NCAN | 0.026202 | -0.88954 | 1.852582 | Up-regulated |
| LOC10028 | 0.026229 | -0.88939 | 1.852397 | Up-regulated |
| NOP58 | 0.026361 | -0.88869 | 1.851494 | Up-regulated |
| CCER1 | 0.026426 | -0.88834 | 1.851047 | Up-regulated |
| LOC1005C | 0.026447 | -0.88823 | 1.850904 | Up-regulated |
| LY6H | 0.026552 | -0.88767 | 1.850192 | Up-regulated |
| ROR1-AS | 0.026584 | -0.8875 | 1.849971 | Up-regulated |
| GBAP1 | 0.026748 | -0.88664 | 1.84886 | Up-regulated |
| RSPH10B | 0.027096 | -0.88481 | 1.846524 | Up-regulated |
| PRRT2 | 0.027137 | -0.8846 | 1.846254 | Up-regulated |
| ITPKB | 0.027698 | -0.8817 | 1.842546 | Up-regulated |
| NUDC | 0.027716 | -0.88161 | 1.842433 | Up-regulated |
| YWHAG | 0.027804 | -0.88116 | 1.841857 | Up-regulated |
| MGC4859 | 0.028054 | -0.87989 | 1.840237 | Up-regulated |
| CXorf24 | 0.028165 | -0.87933 | 1.83952 | Up-regulated |
| PIKFYVE | 0.028237 | -0.87897 | 1.839056 | Up-regulated |
| TAS2R40 | 0.02832 | -0.87855 | 1.838524 | Up-regulated |
| LOC1010C | 0.028348 | -0.8784 | 1.83834 | Up-regulated |
| MCFD2 | 0.028375 | -0.87827 | 1.838169 | Up-regulated |
| ANKRD2C | 0.028468 | -0.8778 | 1.837575 | Up-regulated |

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|------------|----------|----------|----------|--------------|
| SOX11 | 0.028489 | -0.8777 | 1.837442 | Up-regulated |
| NDRG3 | 0.028759 | -0.87635 | 1.835727 | Up-regulated |
| STAR | 0.028983 | -0.87524 | 1.834316 | Up-regulated |
| TMEM17C | 0.029149 | -0.87443 | 1.833278 | Up-regulated |
| RRS1-AS1 | 0.029259 | -0.87389 | 1.832593 | Up-regulated |
| IFITM10 | 0.029292 | -0.87372 | 1.832384 | Up-regulated |
| DLL4 | 0.029329 | -0.87354 | 1.832159 | Up-regulated |
| COG8 | 0.029371 | -0.87334 | 1.831895 | Up-regulated |
| PI3 | 0.029596 | -0.87224 | 1.830506 | Up-regulated |
| FOXR2 | 0.029663 | -0.87192 | 1.830092 | Up-regulated |
| PIWIL2 | 0.029802 | -0.87124 | 1.829239 | Up-regulated |
| LOC14841 | 0.029852 | -0.871 | 1.828933 | Up-regulated |
| CHMP5 | 0.030057 | -0.87002 | 1.827689 | Up-regulated |
| CKLF /// C | 0.03014 | -0.86962 | 1.827182 | Up-regulated |
| DPH3P1 | 0.030211 | -0.86928 | 1.826753 | Up-regulated |
| ZNF236 | 0.030212 | -0.86928 | 1.826749 | Up-regulated |
| SLC9A3R | 0.030269 | -0.869 | 1.826401 | Up-regulated |
| ZNF493 | 0.030352 | -0.86861 | 1.825904 | Up-regulated |
| TNFSF4 | 0.030375 | -0.8685 | 1.825764 | Up-regulated |
| RP11-292I | 0.030559 | -0.86763 | 1.824661 | Up-regulated |
| LOC10272 | 0.030593 | -0.86747 | 1.824459 | Up-regulated |
| RNF144A- | 0.030691 | -0.86701 | 1.823876 | Up-regulated |
| RP9 /// RP | 0.030811 | -0.86644 | 1.823161 | Up-regulated |
| LOC10155 | 0.031537 | -0.86306 | 1.818892 | Up-regulated |
| PET112 | 0.031583 | -0.86285 | 1.818624 | Up-regulated |
| BANP | 0.031586 | -0.86283 | 1.818608 | Up-regulated |
| EPHB1 | 0.031783 | -0.86193 | 1.817469 | Up-regulated |
| LOC55011 | 0.032227 | -0.85991 | 1.81492 | Up-regulated |
| FAM120C | 0.032229 | -0.8599 | 1.814908 | Up-regulated |
| SLC36A1 | 0.032391 | -0.85916 | 1.813987 | Up-regulated |
| SRY | 0.032466 | -0.85883 | 1.813562 | Up-regulated |
| LRCH1 | 0.032472 | -0.8588 | 1.813527 | Up-regulated |
| RTCB | 0.032579 | -0.85832 | 1.812925 | Up-regulated |
| CTSA | 0.032662 | -0.85795 | 1.812459 | Up-regulated |
| RPP40 | 0.032681 | -0.85786 | 1.812349 | Up-regulated |
| MEF2D | 0.033183 | -0.85562 | 1.80954 | Up-regulated |
| CLDN12 /, | 0.033215 | -0.85548 | 1.809363 | Up-regulated |
| IK /// TMC | 0.033288 | -0.85516 | 1.80896 | Up-regulated |
| ASCL3 | 0.033389 | -0.85472 | 1.808402 | Up-regulated |
| OR7E24 | 0.033397 | -0.85468 | 1.808356 | Up-regulated |
| ARHGEF3 | 0.033435 | -0.85451 | 1.808149 | Up-regulated |
| ASH1L | 0.033584 | -0.85386 | 1.807325 | Up-regulated |
| SDE2 | 0.03363 | -0.85366 | 1.807077 | Up-regulated |
| CHRNA6 | 0.033755 | -0.85311 | 1.806391 | Up-regulated |
| N4BP2 | 0.033812 | -0.85286 | 1.80608 | Up-regulated |
| LOC10192 | 0.033818 | -0.85283 | 1.806045 | Up-regulated |
| RNA45S5 | 0.033862 | -0.85264 | 1.805807 | Up-regulated |
| NDUFS1 | 0.033944 | -0.85229 | 1.805361 | Up-regulated |
| EMC6 | 0.034029 | -0.85192 | 1.804899 | Up-regulated |
| TTY8 /// | 0.034079 | -0.8517 | 1.804624 | Up-regulated |
| BC032916 | 0.034109 | -0.85157 | 1.804465 | Up-regulated |
| MAT2B | 0.034177 | -0.85127 | 1.804094 | Up-regulated |
| FDPS | 0.034199 | -0.85118 | 1.80398 | Up-regulated |
| AC005523 | 0.034229 | -0.85105 | 1.803813 | Up-regulated |
| GBA /// G1 | 0.034403 | -0.8503 | 1.80288 | Up-regulated |
| CCDC142 | 0.034407 | -0.85029 | 1.802858 | Up-regulated |

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| KCNK7 | 0.034442 | -0.85014 | 1.802671 | Up-regulated |
| YWHAE | 0.034482 | -0.84996 | 1.802456 | Up-regulated |
| LOC10050 | 0.034492 | -0.84992 | 1.802401 | Up-regulated |
| GTF2A1L | 0.03452 | -0.8498 | 1.802252 | Up-regulated |
| AX746690 | 0.034549 | -0.84967 | 1.802093 | Up-regulated |
| CCDC142 | 0.034557 | -0.84964 | 1.802051 | Up-regulated |
| HMGXB3 | 0.034561 | -0.84962 | 1.802029 | Up-regulated |
| SLCO4C1 | 0.034577 | -0.84956 | 1.801946 | Up-regulated |
| LOC28514 | 0.034912 | -0.84812 | 1.800159 | Up-regulated |
| NFATC3 | 0.03495 | -0.84796 | 1.799959 | Up-regulated |
| CXorf57 | 0.035122 | -0.84724 | 1.799052 | Up-regulated |
| USP9Y | 0.035419 | -0.84598 | 1.79749 | Up-regulated |
| NIF3L1 | 0.035429 | -0.84594 | 1.797439 | Up-regulated |
| ZNF571-A | 0.035477 | -0.84574 | 1.797185 | Up-regulated |
| FAM224A | 0.035533 | -0.8455 | 1.796892 | Up-regulated |
| CTSB | 0.035661 | -0.84497 | 1.796227 | Up-regulated |
| TERF2IP | 0.035804 | -0.84437 | 1.795486 | Up-regulated |
| DHX38 | 0.035835 | -0.84425 | 1.795326 | Up-regulated |
| UTP3 | 0.035888 | -0.84402 | 1.795051 | Up-regulated |
| CMTM1 | 0.035893 | -0.844 | 1.795026 | Up-regulated |
| KIAA0226 | 0.036101 | -0.84314 | 1.793953 | Up-regulated |
| FAM224A | 0.036503 | -0.84148 | 1.791893 | Up-regulated |
| BCORP1 | 0.037157 | -0.83882 | 1.788586 | Up-regulated |
| C3orf79 | 0.037216 | -0.83858 | 1.788289 | Up-regulated |
| HSPD1 | 0.037366 | -0.83798 | 1.787543 | Up-regulated |
| CRCP | 0.037411 | -0.8378 | 1.787317 | Up-regulated |
| ZNF234 | 0.037531 | -0.83731 | 1.786721 | Up-regulated |
| AHSP | 0.038063 | -0.83519 | 1.784093 | Up-regulated |
| LOC10192 | 0.038156 | -0.83482 | 1.783637 | Up-regulated |
| CNPY1 | 0.038271 | -0.83437 | 1.783076 | Up-regulated |
| GPKOW | 0.038578 | -0.83316 | 1.781585 | Up-regulated |
| VPS53 | 0.03858 | -0.83315 | 1.781573 | Up-regulated |
| HSFY1 /// | 0.039029 | -0.8314 | 1.779408 | Up-regulated |
| BHLHE23 | 0.039072 | -0.83123 | 1.779205 | Up-regulated |
| KIF1C | 0.039081 | -0.8312 | 1.779159 | Up-regulated |
| FLJ25917 | 0.039132 | -0.831 | 1.778918 | Up-regulated |
| DGKH | 0.039294 | -0.83037 | 1.778142 | Up-regulated |
| FRG1B | 0.039506 | -0.82955 | 1.777135 | Up-regulated |
| LINC0118 | 0.039611 | -0.82915 | 1.776639 | Up-regulated |
| MAFK | 0.039723 | -0.82872 | 1.776106 | Up-regulated |
| DNTTIP1 | 0.039748 | -0.82862 | 1.775991 | Up-regulated |
| AL832163 | 0.039792 | -0.82845 | 1.775781 | Up-regulated |
| SLC9A3 | 0.039866 | -0.82817 | 1.775435 | Up-regulated |
| PSORS1C | 0.040095 | -0.8273 | 1.774361 | Up-regulated |
| CACNA1E | 0.040295 | -0.82654 | 1.773426 | Up-regulated |
| RP11-116C | 0.040907 | -0.82423 | 1.770595 | Up-regulated |
| SLC25A18 | 0.040908 | -0.82423 | 1.770586 | Up-regulated |
| LINC0064 | 0.040911 | -0.82422 | 1.770573 | Up-regulated |
| LOC10192 | 0.040983 | -0.82395 | 1.770244 | Up-regulated |
| FAM163A | 0.041022 | -0.8238 | 1.770066 | Up-regulated |
| ZC3H15 | 0.041181 | -0.82321 | 1.769337 | Up-regulated |
| CWC25 | 0.041621 | -0.82158 | 1.767334 | Up-regulated |
| LOC44117 | 0.041771 | -0.82102 | 1.766658 | Up-regulated |
| C16orf70 | 0.041782 | -0.82098 | 1.766609 | Up-regulated |
| KCNS3 | 0.041794 | -0.82094 | 1.766557 | Up-regulated |
| PSMA2 | 0.041884 | -0.82061 | 1.76615 | Up-regulated |

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| RP5-1180F | 0.042249 | -0.81927 | 1.764515 | Up-regulated |
| EREG | 0.042288 | -0.81913 | 1.764341 | Up-regulated |
| ZNF23 | 0.042296 | -0.8191 | 1.764305 | Up-regulated |
| UBXN1 | 0.042517 | -0.8183 | 1.763321 | Up-regulated |
| PLIN2 | 0.042789 | -0.81731 | 1.762115 | Up-regulated |
| POU6F2-A | 0.042823 | -0.81719 | 1.761967 | Up-regulated |
| LOC72804 | 0.042992 | -0.81658 | 1.761223 | Up-regulated |
| SLC8A1 | 0.043077 | -0.81627 | 1.76085 | Up-regulated |
| NT5C3A | 0.043459 | -0.8149 | 1.759178 | Up-regulated |
| PGPEP1 | 0.043522 | -0.81468 | 1.758904 | Up-regulated |
| MEX3A | 0.043617 | -0.81434 | 1.758495 | Up-regulated |
| UPK3A | 0.043796 | -0.8137 | 1.757717 | Up-regulated |
| CKLF | 0.043815 | -0.81364 | 1.757635 | Up-regulated |
| SOX1 | 0.043856 | -0.81349 | 1.75746 | Up-regulated |
| PPEF2 | 0.044033 | -0.81286 | 1.756695 | Up-regulated |
| LOC10272 | 0.04415 | -0.81245 | 1.756193 | Up-regulated |
| GRIPAP1 | 0.044393 | -0.8116 | 1.755154 | Up-regulated |
| LPHN3 | 0.044879 | -0.8099 | 1.753088 | Up-regulated |
| TSSK2 | 0.044933 | -0.80971 | 1.752859 | Up-regulated |
| CSMD3 | 0.045105 | -0.80911 | 1.752134 | Up-regulated |
| MTM1 | 0.045239 | -0.80865 | 1.751571 | Up-regulated |
| MAMSTR | 0.045303 | -0.80843 | 1.751303 | Up-regulated |
| NTM | 0.045383 | -0.80815 | 1.750968 | Up-regulated |
| SALL4 | 0.045573 | -0.8075 | 1.750174 | Up-regulated |
| BC045784 | 0.045637 | -0.80728 | 1.749907 | Up-regulated |
| PXDC1 | 0.046078 | -0.80577 | 1.748077 | Up-regulated |
| GTF2A1L | 0.046119 | -0.80563 | 1.747908 | Up-regulated |
| LOC10050 | 0.046265 | -0.80513 | 1.747308 | Up-regulated |
| GABRG2 | 0.046333 | -0.8049 | 1.747027 | Up-regulated |
| BAP1 | 0.046764 | -0.80344 | 1.745262 | Up-regulated |
| MEP1B | 0.046907 | -0.80296 | 1.744683 | Up-regulated |
| PRKAA2 | 0.046952 | -0.80281 | 1.744498 | Up-regulated |
| FAM153A | 0.047007 | -0.80263 | 1.744277 | Up-regulated |
| THUMPD1 | 0.047035 | -0.80253 | 1.744162 | Up-regulated |
| EVA1A | 0.0471 | -0.80231 | 1.743897 | Up-regulated |
| SCLY | 0.04713 | -0.80221 | 1.743776 | Up-regulated |
| KIAA0226 | 0.047297 | -0.80166 | 1.743101 | Up-regulated |
| TMEM126 | 0.047353 | -0.80147 | 1.742875 | Up-regulated |
| OPRK1 | 0.04779 | -0.80002 | 1.741124 | Up-regulated |
| MAFG | 0.048098 | -0.799 | 1.739894 | Up-regulated |
| BV03S1J2 | 0.048165 | -0.79878 | 1.739628 | Up-regulated |
| DDX52 | 0.048448 | -0.79785 | 1.73851 | Up-regulated |
| BC012193 | 0.048455 | -0.79783 | 1.738482 | Up-regulated |
| ASCL5 | 0.04847 | -0.79778 | 1.738423 | Up-regulated |
| CTNNA3 | 0.048546 | -0.79753 | 1.738121 | Up-regulated |
| WDR66 | 0.048556 | -0.7975 | 1.738083 | Up-regulated |
| WDR45 | 0.048668 | -0.79713 | 1.737643 | Up-regulated |
| ZNF273 | 0.048699 | -0.79703 | 1.737519 | Up-regulated |
| EMG1 | 0.048716 | -0.79697 | 1.737454 | Up-regulated |
| LINC0091 | 0.048736 | -0.79691 | 1.737375 | Up-regulated |
| AAK1 | 0.04876 | -0.79683 | 1.737282 | Up-regulated |
| NCRNA001 | 0.048887 | -0.79642 | 1.736784 | Up-regulated |
| WDR4 | 0.049268 | -0.79518 | 1.735297 | Up-regulated |
| CHST10 | 0.049647 | -0.79396 | 1.733826 | Up-regulated |
| MARK1 | 0.049906 | -0.79313 | 1.732828 | Up-regulated |
| EFS | 0.001731 | 1.195568 | 2.29035 | Down-regulated |

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| LOC10272 | 0.002132 | 1.176306 | 2.259974 | Down-regulated |
| RPS4X | 0.002215 | 1.172716 | 2.254358 | Down-regulated |
| GOPC | 0.002425 | 1.164143 | 2.241001 | Down-regulated |
| EIF1AX | 0.002631 | 1.156299 | 2.228849 | Down-regulated |
| FHIT | 0.002736 | 1.152512 | 2.223007 | Down-regulated |
| TBC1D5 | 0.002873 | 1.147744 | 2.215672 | Down-regulated |
| UFL1 | 0.003821 | 1.119305 | 2.172423 | Down-regulated |
| LOC14578 | 0.003897 | 1.117271 | 2.169363 | Down-regulated |
| HTR7P1 | 0.004341 | 1.106154 | 2.15271 | Down-regulated |
| DHRS4 /// | 0.004596 | 1.1002 | 2.143844 | Down-regulated |
| SNRK-AS | 0.004808 | 1.095471 | 2.136829 | Down-regulated |
| SEC63 | 0.004814 | 1.095333 | 2.136624 | Down-regulated |
| NDST2 /// | 0.004817 | 1.09528 | 2.136546 | Down-regulated |
| ASS1 | 0.004946 | 1.092466 | 2.132382 | Down-regulated |
| MGAT5B | 0.005226 | 1.086614 | 2.12375 | Down-regulated |
| CCDC25 | 0.006416 | 1.064338 | 2.091209 | Down-regulated |
| GNG2 | 0.006887 | 1.056481 | 2.079852 | Down-regulated |
| PCK2 | 0.007474 | 1.047301 | 2.06666 | Down-regulated |
| KCNAB1 | 0.007562 | 1.045979 | 2.064767 | Down-regulated |
| PLOD2 | 0.00791 | 1.040866 | 2.057462 | Down-regulated |
| LOC10013 | 0.007935 | 1.040507 | 2.056951 | Down-regulated |
| SLC22A17 | 0.008298 | 1.035385 | 2.049661 | Down-regulated |
| SOAT2 | 0.008431 | 1.03356 | 2.047069 | Down-regulated |
| ACADSB | 0.00907 | 1.025103 | 2.035104 | Down-regulated |
| HOXC10 | 0.009248 | 1.022835 | 2.031907 | Down-regulated |
| SLC4A11 | 0.010302 | 1.010095 | 2.014044 | Down-regulated |
| ERICH1 // | 0.010524 | 1.007554 | 2.010499 | Down-regulated |
| FPGS | 0.010713 | 1.005429 | 2.00754 | Down-regulated |
| HMBOX1 | 0.010714 | 1.005414 | 2.007519 | Down-regulated |
| SLC16A2 | 0.011113 | 1.001021 | 2.001416 | Down-regulated |
| ASCC3 | 0.011552 | 0.996334 | 1.994925 | Down-regulated |
| SLC25A45 | 0.011734 | 0.994438 | 1.992304 | Down-regulated |
| OBSL1 | 0.012001 | 0.991697 | 1.988522 | Down-regulated |
| SCARA3 | 0.012158 | 0.990112 | 1.986339 | Down-regulated |
| BTG1 | 0.012268 | 0.988999 | 1.984808 | Down-regulated |
| HEATR4 | 0.01256 | 0.986115 | 1.980844 | Down-regulated |
| MLH1 | 0.012771 | 0.984059 | 1.978022 | Down-regulated |
| CDC14B | 0.012894 | 0.982876 | 1.976402 | Down-regulated |
| PLXNA1 | 0.013064 | 0.981256 | 1.974183 | Down-regulated |
| RASGEF1 | 0.013333 | 0.978726 | 1.970724 | Down-regulated |
| LINC0093 | 0.01458 | 0.96753 | 1.95549 | Down-regulated |
| CCDC64B | 0.015026 | 0.963721 | 1.950334 | Down-regulated |
| LINC0062 | 0.01522 | 0.962085 | 1.948123 | Down-regulated |
| EFEMP2 | 0.015662 | 0.958435 | 1.943201 | Down-regulated |
| LOXL1 | 0.015671 | 0.958362 | 1.943102 | Down-regulated |
| PLCL2 | 0.01576 | 0.957638 | 1.942127 | Down-regulated |
| RP11-420F | 0.016151 | 0.9545 | 1.937908 | Down-regulated |
| KRT18P44 | 0.016258 | 0.95365 | 1.936766 | Down-regulated |
| C8orf37 | 0.016298 | 0.953333 | 1.936341 | Down-regulated |
| CDC42BP | 0.016325 | 0.953118 | 1.936052 | Down-regulated |
| EPM2A | 0.016444 | 0.952187 | 1.934804 | Down-regulated |
| LOC10192 | 0.016917 | 0.948519 | 1.92989 | Down-regulated |
| HEBP1 | 0.017474 | 0.944313 | 1.924272 | Down-regulated |
| NR1I2 | 0.017598 | 0.943391 | 1.923044 | Down-regulated |
| ARMCX6 | 0.01803 | 0.940217 | 1.918816 | Down-regulated |
| LINC0112 | 0.019029 | 0.933116 | 1.909395 | Down-regulated |

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|-----------|----------|----------|----------|----------------|
| AGAP9 | 0.019248 | 0.931602 | 1.907393 | Down-regulated |
| THY1 | 0.019318 | 0.931119 | 1.906754 | Down-regulated |
| MTMR1 | 0.019554 | 0.929512 | 1.904632 | Down-regulated |
| NT5DC1 | 0.019753 | 0.928161 | 1.902849 | Down-regulated |
| TUBE1 | 0.019796 | 0.927874 | 1.902471 | Down-regulated |
| EPM2AIP1 | 0.0199 | 0.927171 | 1.901544 | Down-regulated |
| CRIP2 | 0.020448 | 0.923542 | 1.896767 | Down-regulated |
| NXT2 | 0.020449 | 0.923534 | 1.896757 | Down-regulated |
| PPP2R5E | 0.020756 | 0.921536 | 1.894131 | Down-regulated |
| MMP17 | 0.020887 | 0.920692 | 1.893023 | Down-regulated |
| MYO5A | 0.021082 | 0.919436 | 1.891376 | Down-regulated |
| C5orf42 | 0.021274 | 0.918212 | 1.889772 | Down-regulated |
| SESN1 | 0.022482 | 0.910718 | 1.87998 | Down-regulated |
| ALDH6A1 | 0.022685 | 0.909491 | 1.878382 | Down-regulated |
| BMS1P5 | 0.023517 | 0.904559 | 1.871972 | Down-regulated |
| EPHX2 | 0.023734 | 0.903291 | 1.870328 | Down-regulated |
| TRIM35 | 0.023873 | 0.902486 | 1.869284 | Down-regulated |
| CD248 | 0.023888 | 0.902399 | 1.869172 | Down-regulated |
| MTHFS // | 0.023955 | 0.902012 | 1.86867 | Down-regulated |
| SACM1L | 0.024478 | 0.899029 | 1.864811 | Down-regulated |
| RPS4XP2 | 0.025017 | 0.896003 | 1.860904 | Down-regulated |
| HOXC6 | 0.025623 | 0.892667 | 1.856605 | Down-regulated |
| ARHGEF3 | 0.025785 | 0.891783 | 1.855467 | Down-regulated |
| HOXC5 | 0.0259 | 0.891161 | 1.854668 | Down-regulated |
| SCN2A | 0.025932 | 0.890987 | 1.854444 | Down-regulated |
| HDAC2 | 0.025954 | 0.890869 | 1.854292 | Down-regulated |
| B3GALT2 | 0.025957 | 0.890852 | 1.854271 | Down-regulated |
| MAP3K7 | 0.026257 | 0.889244 | 1.852205 | Down-regulated |
| RP11-356f | 0.026593 | 0.887455 | 1.84991 | Down-regulated |
| ACADS | 0.026641 | 0.8872 | 1.849583 | Down-regulated |
| ZNF248 | 0.026975 | 0.885447 | 1.847336 | Down-regulated |
| SAT2 | 0.026976 | 0.885441 | 1.847329 | Down-regulated |
| AHNAK | 0.027785 | 0.881256 | 1.841978 | Down-regulated |
| LOC10192 | 0.027921 | 0.880567 | 1.841099 | Down-regulated |
| STEAP3 | 0.02838 | 0.878245 | 1.838138 | Down-regulated |
| LOC65299 | 0.028453 | 0.877878 | 1.83767 | Down-regulated |
| AJ420595 | 0.028544 | 0.877425 | 1.837094 | Down-regulated |
| FXVD4 | 0.028615 | 0.87707 | 1.836642 | Down-regulated |
| KAT6B | 0.028671 | 0.876788 | 1.836283 | Down-regulated |
| BBS10 | 0.028814 | 0.876079 | 1.83538 | Down-regulated |
| XPNPEP2 | 0.028955 | 0.875382 | 1.834493 | Down-regulated |
| CRIP3 | 0.029282 | 0.873773 | 1.83245 | Down-regulated |
| KLHL13 | 0.030508 | 0.867869 | 1.824966 | Down-regulated |
| SERINC2 | 0.030697 | 0.866978 | 1.823838 | Down-regulated |
| IRGM | 0.030779 | 0.866589 | 1.823347 | Down-regulated |
| AGAP10 // | 0.031499 | 0.863237 | 1.819115 | Down-regulated |
| PEX7 | 0.031557 | 0.86297 | 1.818778 | Down-regulated |
| ALOX12B | 0.032008 | 0.860903 | 1.816175 | Down-regulated |
| FAM65C | 0.032233 | 0.859878 | 1.814885 | Down-regulated |
| SLC15A2 | 0.032436 | 0.858963 | 1.813735 | Down-regulated |
| CRYBA4 | 0.032553 | 0.858435 | 1.813071 | Down-regulated |
| KCNMA1 | 0.032687 | 0.857834 | 1.812315 | Down-regulated |
| DHH | 0.032764 | 0.857489 | 1.811882 | Down-regulated |
| SP8 | 0.033164 | 0.855711 | 1.80965 | Down-regulated |
| FAM101A | 0.033992 | 0.852076 | 1.805097 | Down-regulated |
| ATP6V1B | 0.034138 | 0.851447 | 1.804309 | Down-regulated |

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| CD164 | 0.034224 | 0.851074 | 1.803843 | Down-regulated |
| PTPN23 | 0.034257 | 0.85093 | 1.803663 | Down-regulated |
| GLT8D1 | 0.034454 | 0.850082 | 1.802603 | Down-regulated |
| XPC | 0.034531 | 0.849754 | 1.802194 | Down-regulated |
| PLEKHB1 | 0.034597 | 0.849468 | 1.801837 | Down-regulated |
| LAMA5-A | 0.034991 | 0.847789 | 1.799741 | Down-regulated |
| USP45 | 0.035222 | 0.846813 | 1.798524 | Down-regulated |
| TONSL | 0.035415 | 0.846002 | 1.797512 | Down-regulated |
| AX748267 | 0.035435 | 0.845918 | 1.797408 | Down-regulated |
| UNC5D | 0.035617 | 0.845152 | 1.796454 | Down-regulated |
| RNF217 | 0.035627 | 0.845113 | 1.796406 | Down-regulated |
| RP11-97C | 0.035812 | 0.844341 | 1.795444 | Down-regulated |
| RALGAP2 | 0.036058 | 0.843316 | 1.794169 | Down-regulated |
| SEC13 | 0.036217 | 0.842661 | 1.793354 | Down-regulated |
| LYRM2 | 0.036232 | 0.8426 | 1.793279 | Down-regulated |
| CDKN1C | 0.036236 | 0.842582 | 1.793257 | Down-regulated |
| ARHGAP2 | 0.036377 | 0.842002 | 1.792536 | Down-regulated |
| METTL25 | 0.036605 | 0.841067 | 1.791375 | Down-regulated |
| MIOX | 0.03679 | 0.840309 | 1.790433 | Down-regulated |
| TRIM13 | 0.036792 | 0.8403 | 1.790423 | Down-regulated |
| PM20D2 | 0.037078 | 0.839138 | 1.788981 | Down-regulated |
| NPRL3 | 0.037398 | 0.837848 | 1.787382 | Down-regulated |
| CORO2B | 0.037458 | 0.837606 | 1.787082 | Down-regulated |
| SLC25A3C | 0.038205 | 0.834629 | 1.783399 | Down-regulated |
| H2BFXP | 0.038313 | 0.834203 | 1.782872 | Down-regulated |
| ITPKA | 0.038368 | 0.833986 | 1.782604 | Down-regulated |
| SNX3 | 0.038945 | 0.831727 | 1.779814 | Down-regulated |
| NKD2 | 0.039274 | 0.830449 | 1.778239 | Down-regulated |
| TRNT1 | 0.039399 | 0.829967 | 1.777645 | Down-regulated |
| OFD1 | 0.03957 | 0.829306 | 1.77683 | Down-regulated |
| SORBS3 | 0.039585 | 0.82925 | 1.776761 | Down-regulated |
| UBE3C | 0.039615 | 0.829135 | 1.77662 | Down-regulated |
| TMEM27 | 0.039645 | 0.829019 | 1.776477 | Down-regulated |
| CDK5RA1 | 0.039968 | 0.827783 | 1.774955 | Down-regulated |
| CHMP4A | 0.040016 | 0.827599 | 1.774729 | Down-regulated |
| SPOP | 0.040058 | 0.82744 | 1.774533 | Down-regulated |
| DZIP1L | 0.040415 | 0.826084 | 1.772866 | Down-regulated |
| BNIP3L | 0.040596 | 0.825399 | 1.772025 | Down-regulated |
| GLIS2 | 0.040893 | 0.824287 | 1.770659 | Down-regulated |
| EXD2 | 0.04115 | 0.823324 | 1.769478 | Down-regulated |
| FLJ13744 | 0.041276 | 0.822855 | 1.768903 | Down-regulated |
| THTPA | 0.041802 | 0.820908 | 1.766517 | Down-regulated |
| DCN | 0.041831 | 0.820803 | 1.766389 | Down-regulated |
| GP9 | 0.042179 | 0.819528 | 1.764828 | Down-regulated |
| LOC10012 | 0.042238 | 0.819312 | 1.764565 | Down-regulated |
| KLF4 | 0.042655 | 0.817794 | 1.762709 | Down-regulated |
| ANXA4 | 0.042768 | 0.817384 | 1.762207 | Down-regulated |
| CASP8AP2 | 0.04298 | 0.816621 | 1.761276 | Down-regulated |
| CD160 | 0.043133 | 0.816069 | 1.760602 | Down-regulated |
| CRBN | 0.043491 | 0.814789 | 1.759041 | Down-regulated |
| TXNIP | 0.043701 | 0.81404 | 1.758127 | Down-regulated |
| AC016999 | 0.043887 | 0.813381 | 1.757324 | Down-regulated |
| C14orf28 | 0.043962 | 0.813115 | 1.757001 | Down-regulated |
| DDB2 | 0.044251 | 0.812097 | 1.755762 | Down-regulated |
| CRIP1 | 0.044255 | 0.812083 | 1.755745 | Down-regulated |
| LPAR3 | 0.044441 | 0.811427 | 1.754947 | Down-regulated |

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|-----------|----------|----------|----------|----------------|
| RP11-263F | 0.044643 | 0.810721 | 1.754088 | Down-regulated |
| AGAP11 | 0.044857 | 0.809974 | 1.753179 | Down-regulated |
| RP11-247I | 0.044913 | 0.809779 | 1.752943 | Down-regulated |
| LRCH2 | 0.045599 | 0.807407 | 1.750063 | Down-regulated |
| FGFR1 | 0.045675 | 0.807146 | 1.749747 | Down-regulated |
| AK055981 | 0.045716 | 0.807007 | 1.749578 | Down-regulated |
| ZFYVE20 | 0.04579 | 0.806754 | 1.749271 | Down-regulated |
| SNHG18 | 0.046115 | 0.805642 | 1.747924 | Down-regulated |
| DOCK11 | 0.046293 | 0.805038 | 1.747192 | Down-regulated |
| CX3CL1 | 0.046322 | 0.804939 | 1.747072 | Down-regulated |
| RPL34-AS | 0.046678 | 0.803736 | 1.745616 | Down-regulated |
| AGAP6 | 0.046733 | 0.803547 | 1.745388 | Down-regulated |
| SEC16B | 0.047185 | 0.802033 | 1.743556 | Down-regulated |
| TLX1 | 0.047414 | 0.801268 | 1.742632 | Down-regulated |
| DHRS4-A | 0.047659 | 0.800451 | 1.741645 | Down-regulated |
| KRT19 | 0.048031 | 0.799221 | 1.740161 | Down-regulated |
| LOC10013 | 0.048093 | 0.799016 | 1.739913 | Down-regulated |
| HECW1-IT1 | 0.048102 | 0.798988 | 1.73988 | Down-regulated |
| RBM25 | 0.048581 | 0.797416 | 1.737985 | Down-regulated |
| CHRFAM7 | 0.048624 | 0.797274 | 1.737815 | Down-regulated |
| RP11-708J | 0.048739 | 0.796901 | 1.737365 | Down-regulated |
| TMEM43 | 0.049306 | 0.795058 | 1.735147 | Down-regulated |
| VILL | 0.049421 | 0.794687 | 1.734701 | Down-regulated |
| GALNT11 | 0.049509 | 0.794404 | 1.734361 | Down-regulated |

s in GSE14827.

Table S2. Differentially expressed genes between OS patients who did and did not develop recurrence

| Gene | Symlp value | log2Ratio | Fold Change | direction |
|----------|-------------|-----------|-------------|--------------|
| WSB1 | 0.000108 | -1.18053 | 2.266605 | Up-regulated |
| CYBRD1 | 0.000196 | -1.17653 | 2.260324 | Up-regulated |
| C14ORF11 | 0.000237 | -1.11167 | 2.160957 | Up-regulated |
| FCGBP | 0.000338 | -1.02431 | 2.033986 | Up-regulated |
| ATF5 | 0.000444 | -1.13221 | 2.191945 | Up-regulated |
| SNORD96 | 0.000464 | -1.09383 | 2.134401 | Up-regulated |
| KCNIP3 | 0.000667 | -1.10374 | 2.149109 | Up-regulated |
| ADAMTS | 0.00067 | -1.10095 | 2.144957 | Up-regulated |
| CENTG2 | 0.000683 | -1.09154 | 2.131021 | Up-regulated |
| RECK | 0.000732 | -1.06882 | 2.097713 | Up-regulated |
| HOXC10 | 0.000774 | -1.06261 | 2.088702 | Up-regulated |
| BRD1 | 0.000824 | -1.10081 | 2.144745 | Up-regulated |
| BTBD15 | 0.000853 | -1.05121 | 2.072272 | Up-regulated |
| AKAP8L | 0.000916 | -1.02918 | 2.040858 | Up-regulated |
| SNORA54 | 0.000917 | -1.00496 | 2.006892 | Up-regulated |
| OSGEP | 0.001107 | -0.94772 | 1.928819 | Up-regulated |
| MRC2 | 0.001182 | -1.0112 | 2.015586 | Up-regulated |
| NSUN6 | 0.001282 | -1.04204 | 2.059143 | Up-regulated |
| TRPM4 | 0.001324 | -1.05826 | 2.082418 | Up-regulated |
| VCP | 0.001375 | -1.0374 | 2.052531 | Up-regulated |
| NEU4 | 0.001472 | -1.03166 | 2.044372 | Up-regulated |
| SCFD1 | 0.001619 | -1.01832 | 2.025554 | Up-regulated |
| HOXA5 | 0.001626 | -0.99563 | 1.993955 | Up-regulated |
| NIPSNAP1 | 0.001813 | -1.00597 | 2.008297 | Up-regulated |
| C11ORF54 | 0.001845 | -0.99586 | 1.994275 | Up-regulated |
| PLCD4 | 0.001845 | -1.03536 | 2.049626 | Up-regulated |
| CRSP9 | 0.001926 | -0.97105 | 1.96027 | Up-regulated |
| GIYD1 | 0.001948 | -1.01568 | 2.021856 | Up-regulated |
| SLC27A3 | 0.002013 | -0.97925 | 1.971435 | Up-regulated |
| CBLN3 | 0.002021 | -0.98069 | 1.973415 | Up-regulated |
| VCPIP1 | 0.00206 | -1.01363 | 2.01898 | Up-regulated |
| SNORD9 | 0.002137 | -1.00746 | 2.010374 | Up-regulated |
| SLC12A2 | 0.002182 | -0.91875 | 1.890476 | Up-regulated |
| FAM70B | 0.002328 | -0.97185 | 1.961359 | Up-regulated |
| SCARNA1 | 0.002332 | -0.95227 | 1.934913 | Up-regulated |
| PLA2G4B | 0.002346 | -0.95577 | 1.939617 | Up-regulated |
| THOC2 | 0.002357 | -0.95895 | 1.943895 | Up-regulated |
| ZNF511 | 0.002432 | -0.91302 | 1.882989 | Up-regulated |
| VPS41 | 0.002488 | -1.00301 | 2.004176 | Up-regulated |
| KIAA1704 | 0.002553 | -0.96214 | 1.948198 | Up-regulated |
| KIAA0251 | 0.002557 | -0.98323 | 1.976893 | Up-regulated |
| PNPLA6 | 0.002562 | -0.96183 | 1.947777 | Up-regulated |
| ACACB | 0.002612 | -0.95071 | 1.932823 | Up-regulated |
| RICTOR | 0.002617 | -0.96348 | 1.950006 | Up-regulated |
| MET | 0.002649 | -0.89702 | 1.862215 | Up-regulated |
| PI16 | 0.002733 | -0.9753 | 1.966047 | Up-regulated |
| DECR1 | 0.002924 | -0.9136 | 1.883739 | Up-regulated |
| ACSS2 | 0.003018 | -0.89762 | 1.862985 | Up-regulated |
| COL4A2 | 0.003118 | -0.95325 | 1.936224 | Up-regulated |
| REV3L | 0.003348 | -0.95713 | 1.941446 | Up-regulated |
| ICK | 0.00339 | -0.96344 | 1.949949 | Up-regulated |
| UBA7 | 0.003499 | -0.92806 | 1.902717 | Up-regulated |
| RAB5A | 0.00356 | -0.92285 | 1.895863 | Up-regulated |
| EIF3L | 0.003561 | -0.95457 | 1.937999 | Up-regulated |

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|----------|----------|----------|----------|--------------|
| CD79B | 0.00375 | -0.9716 | 1.961015 | Up-regulated |
| GRM2 | 0.003974 | -0.92611 | 1.900142 | Up-regulated |
| PEBP1 | 0.00403 | -0.95837 | 1.943114 | Up-regulated |
| SRGAP2 | 0.004077 | -0.95079 | 1.932934 | Up-regulated |
| HMCN1 | 0.004108 | -0.93169 | 1.907503 | Up-regulated |
| COPS8 | 0.004132 | -0.89275 | 1.856718 | Up-regulated |
| RAP2C | 0.004163 | -0.94003 | 1.918564 | Up-regulated |
| EPB41L2 | 0.004237 | -0.93739 | 1.915067 | Up-regulated |
| ATMIN | 0.00442 | -0.92017 | 1.892342 | Up-regulated |
| ERG | 0.004435 | -0.88588 | 1.847896 | Up-regulated |
| TOMM7 | 0.004444 | -0.94094 | 1.919783 | Up-regulated |
| TLK1 | 0.00449 | -0.86546 | 1.821925 | Up-regulated |
| SNORD46 | 0.004498 | -0.9481 | 1.929332 | Up-regulated |
| SNORD8 | 0.004666 | -0.92351 | 1.896722 | Up-regulated |
| STK32B | 0.004691 | -0.86152 | 1.816947 | Up-regulated |
| INO80B | 0.004875 | -0.93093 | 1.906503 | Up-regulated |
| CHCHD8 | 0.004935 | -0.92733 | 1.901754 | Up-regulated |
| CCDC93 | 0.004986 | -0.93411 | 1.910709 | Up-regulated |
| CPXM1 | 0.004997 | -0.93598 | 1.913195 | Up-regulated |
| TMEM91 | 0.005058 | -0.90435 | 1.871703 | Up-regulated |
| EBP | 0.005061 | -0.89424 | 1.858626 | Up-regulated |
| SNORA20 | 0.005103 | -0.92072 | 1.893054 | Up-regulated |
| C1ORF35 | 0.00513 | -0.91848 | 1.890128 | Up-regulated |
| LOC10019 | 0.005133 | -0.85933 | 1.814201 | Up-regulated |
| HP1BP3 | 0.005171 | -0.88411 | 1.845625 | Up-regulated |
| SEZ6 | 0.005225 | -0.88661 | 1.848824 | Up-regulated |
| AEBP1 | 0.005247 | -0.88348 | 1.844815 | Up-regulated |
| PLCB1 | 0.005269 | -0.92059 | 1.892883 | Up-regulated |
| PRICKLE2 | 0.00532 | -0.92427 | 1.897728 | Up-regulated |
| ZHX1 | 0.005344 | -0.8822 | 1.843189 | Up-regulated |
| MEA1 | 0.005532 | -0.90867 | 1.877317 | Up-regulated |
| LIMA1 | 0.005609 | -0.936 | 1.913221 | Up-regulated |
| CFD | 0.005735 | -0.91465 | 1.885108 | Up-regulated |
| NDUFS7 | 0.005858 | -0.90582 | 1.87361 | Up-regulated |
| TRIM66 | 0.005865 | -0.9136 | 1.883734 | Up-regulated |
| C6ORF153 | 0.005886 | -0.91031 | 1.879447 | Up-regulated |
| ANKMY1 | 0.005896 | -0.82843 | 1.775754 | Up-regulated |
| SCARNA6 | 0.00596 | -0.89366 | 1.857886 | Up-regulated |
| LARP7 | 0.006001 | -0.90869 | 1.877334 | Up-regulated |
| YIF1B | 0.006115 | -0.85282 | 1.806032 | Up-regulated |
| SIAH1 | 0.006173 | -0.90299 | 1.869932 | Up-regulated |
| SEZ6L | 0.006221 | -0.8741 | 1.83286 | Up-regulated |
| MRPL19 | 0.006258 | -0.91374 | 1.883925 | Up-regulated |
| SNORD84 | 0.006261 | -0.8783 | 1.838212 | Up-regulated |
| REERG | 0.006311 | -0.84329 | 1.794136 | Up-regulated |
| NOP14 | 0.006346 | -0.83763 | 1.787111 | Up-regulated |
| ARAP1 | 0.006432 | -0.88533 | 1.847182 | Up-regulated |
| POMT1 | 0.006494 | -0.83834 | 1.787988 | Up-regulated |
| HIST1H2E | 0.006695 | -0.90234 | 1.869098 | Up-regulated |
| C17ORF28 | 0.006752 | -0.89105 | 1.854527 | Up-regulated |
| CLCNKA | 0.006772 | -0.86837 | 1.825604 | Up-regulated |
| IYD | 0.006823 | -0.86783 | 1.824911 | Up-regulated |
| RPL19 | 0.007306 | -0.88699 | 1.849312 | Up-regulated |
| DMWD | 0.007343 | -0.87742 | 1.837092 | Up-regulated |
| RHOJ | 0.007605 | -0.87717 | 1.836769 | Up-regulated |
| TIA1 | 0.007843 | -0.90017 | 1.866284 | Up-regulated |

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|----------|----------|----------|----------|--------------|
| ATP9A | 0.00808 | -0.89484 | 1.8594 | Up-regulated |
| HTA | 0.008086 | -0.84283 | 1.793569 | Up-regulated |
| NDUFB4 | 0.008407 | -0.85697 | 1.811228 | Up-regulated |
| CHMP1A | 0.008436 | -0.85505 | 1.808824 | Up-regulated |
| TSEN34 | 0.00846 | -0.78802 | 1.726698 | Up-regulated |
| DUS2L | 0.008493 | -0.85023 | 1.802788 | Up-regulated |
| KIAA0556 | 0.008586 | -0.89052 | 1.853849 | Up-regulated |
| C1R | 0.008621 | -0.85026 | 1.802823 | Up-regulated |
| AIF1L | 0.008706 | -0.88781 | 1.85037 | Up-regulated |
| PSAP | 0.008798 | -0.87271 | 1.831096 | Up-regulated |
| SNORD12 | 0.008806 | -0.87006 | 1.827743 | Up-regulated |
| SPNS1 | 0.008939 | -0.85707 | 1.811361 | Up-regulated |
| C4ORF34 | 0.009072 | -0.8296 | 1.777192 | Up-regulated |
| RASSF7 | 0.009079 | -0.86608 | 1.822706 | Up-regulated |
| ZNF830 | 0.009121 | -0.85055 | 1.803184 | Up-regulated |
| TMEM53 | 0.009131 | -0.86285 | 1.818623 | Up-regulated |
| PCMT1 | 0.009168 | -0.88614 | 1.848226 | Up-regulated |
| ZNF146 | 0.009188 | -0.85538 | 1.809232 | Up-regulated |
| UBE2M | 0.00921 | -0.79588 | 1.736133 | Up-regulated |
| MSRB2 | 0.009245 | -0.77366 | 1.709596 | Up-regulated |
| GPER | 0.00927 | -0.85434 | 1.807927 | Up-regulated |
| RILPL1 | 0.009334 | -0.85369 | 1.807118 | Up-regulated |
| EIF4G3 | 0.009402 | -0.85397 | 1.807467 | Up-regulated |
| WDR22 | 0.009459 | -0.817 | 1.761736 | Up-regulated |
| PNN | 0.009559 | -0.87732 | 1.83696 | Up-regulated |
| TRPC4 | 0.009621 | -0.83667 | 1.785918 | Up-regulated |
| COX5B | 0.009674 | -0.81496 | 1.759249 | Up-regulated |
| KCNMB4 | 0.009748 | -0.86174 | 1.817225 | Up-regulated |
| PRR14 | 0.009834 | -0.87716 | 1.836753 | Up-regulated |
| OSBPL1A | 0.009891 | -0.79242 | 1.731975 | Up-regulated |
| AIF1 | 0.009909 | -0.84571 | 1.797145 | Up-regulated |
| PTCD1 | 0.009929 | -0.7729 | 1.708702 | Up-regulated |
| C13ORF34 | 0.010204 | -0.85705 | 1.811332 | Up-regulated |
| ALDH5A1 | 0.010242 | -0.83308 | 1.781489 | Up-regulated |
| FRAG1 | 0.010461 | -0.81991 | 1.765292 | Up-regulated |
| FAM116B | 0.010545 | -0.78249 | 1.7201 | Up-regulated |
| FKBP14 | 0.010648 | -0.80944 | 1.752536 | Up-regulated |
| RAG1 | 0.010667 | -0.79971 | 1.740752 | Up-regulated |
| NXPH4 | 0.010674 | -0.84699 | 1.798742 | Up-regulated |
| LOC14841 | 0.010684 | -0.83291 | 1.781278 | Up-regulated |
| POTEG | 0.01072 | -0.76547 | 1.699925 | Up-regulated |
| TUBA4 | 0.010759 | -0.75552 | 1.688236 | Up-regulated |
| PIK3R6 | 0.010804 | -0.76705 | 1.701788 | Up-regulated |
| AOC3 | 0.010842 | -0.84559 | 1.796998 | Up-regulated |
| LARGE | 0.010866 | -0.85814 | 1.812698 | Up-regulated |
| GSN | 0.010878 | -0.83729 | 1.786697 | Up-regulated |
| SLC4A7 | 0.01088 | -0.82074 | 1.766307 | Up-regulated |
| ECGF1 | 0.011062 | -0.86151 | 1.816939 | Up-regulated |
| LCMT1 | 0.011129 | -0.81374 | 1.757767 | Up-regulated |
| CDK10 | 0.011184 | -0.78427 | 1.722224 | Up-regulated |
| CD3EAP | 0.011227 | -0.84998 | 1.802477 | Up-regulated |
| GAK | 0.01126 | -0.84701 | 1.798764 | Up-regulated |
| ARHGAP2 | 0.011291 | -0.82225 | 1.768165 | Up-regulated |
| UBE3A | 0.011335 | -0.76366 | 1.697796 | Up-regulated |
| P2RX6 | 0.011412 | -0.79259 | 1.732185 | Up-regulated |
| RNF121 | 0.011435 | -0.84191 | 1.792417 | Up-regulated |

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|----------|----------|----------|----------|--------------|
| TNRC6A | 0.01146 | -0.80451 | 1.746558 | Up-regulated |
| JARID1D | 0.011535 | -0.80517 | 1.747353 | Up-regulated |
| HIST1H1I | 0.011603 | -0.84818 | 1.800227 | Up-regulated |
| ACLY | 0.011635 | -0.83361 | 1.782133 | Up-regulated |
| MAGOHB | 0.011666 | -0.84807 | 1.800093 | Up-regulated |
| PQBP1 | 0.011666 | -0.83753 | 1.786993 | Up-regulated |
| SSPO | 0.011805 | -0.83127 | 1.779245 | Up-regulated |
| PSMB10 | 0.011814 | -0.817 | 1.761741 | Up-regulated |
| MFAP5 | 0.011827 | -0.80993 | 1.753128 | Up-regulated |
| C16ORF48 | 0.011927 | -0.75269 | 1.684936 | Up-regulated |
| HARS | 0.011937 | -0.82202 | 1.767885 | Up-regulated |
| CHD8 | 0.012049 | -0.78364 | 1.721467 | Up-regulated |
| SNRP70 | 0.012161 | -0.83893 | 1.788728 | Up-regulated |
| CAPRIN1 | 0.012176 | -0.84578 | 1.797238 | Up-regulated |
| MXD4 | 0.012265 | -0.85012 | 1.802646 | Up-regulated |
| LOC28636 | 0.012302 | -0.78945 | 1.728417 | Up-regulated |
| TUBA4A | 0.012408 | -0.74215 | 1.672666 | Up-regulated |
| RGS10 | 0.012459 | -0.78587 | 1.72413 | Up-regulated |
| ARL6IP5 | 0.012489 | -0.79337 | 1.733116 | Up-regulated |
| PEX11G | 0.012502 | -0.82956 | 1.777143 | Up-regulated |
| HOXA2 | 0.012514 | -0.82906 | 1.776534 | Up-regulated |
| STK3 | 0.012649 | -0.79897 | 1.739864 | Up-regulated |
| MRPL37 | 0.012782 | -0.817 | 1.76174 | Up-regulated |
| PDCD4 | 0.012784 | -0.84336 | 1.794219 | Up-regulated |
| HOXD3 | 0.012845 | -0.83196 | 1.780106 | Up-regulated |
| LYRM1 | 0.012919 | -0.77332 | 1.709204 | Up-regulated |
| MIR645 | 0.012994 | -0.8443 | 1.795397 | Up-regulated |
| C9ORF82 | 0.01305 | -0.81709 | 1.761845 | Up-regulated |
| SNORD11 | 0.013068 | -0.8226 | 1.768587 | Up-regulated |
| RFTN1 | 0.013074 | -0.75239 | 1.684586 | Up-regulated |
| MIR320B2 | 0.013183 | -0.79015 | 1.729259 | Up-regulated |
| SNORD10 | 0.013225 | -0.81797 | 1.762925 | Up-regulated |
| SLC12A9 | 0.013256 | -0.77204 | 1.707687 | Up-regulated |
| ZFP36 | 0.013261 | -0.82201 | 1.767866 | Up-regulated |
| TSPAN17 | 0.013274 | -0.77324 | 1.709107 | Up-regulated |
| C12ORF23 | 0.013284 | -0.83634 | 1.785512 | Up-regulated |
| MAGEE2 | 0.013292 | -0.8228 | 1.76883 | Up-regulated |
| FAM189A | 0.013316 | -0.83556 | 1.784551 | Up-regulated |
| REXO4 | 0.013463 | -0.83847 | 1.788153 | Up-regulated |
| CCDC130 | 0.013557 | -0.79151 | 1.730886 | Up-regulated |
| CTSA | 0.013578 | -0.80597 | 1.748322 | Up-regulated |
| R3HDM1 | 0.013608 | -0.82302 | 1.76911 | Up-regulated |
| ZNF512B | 0.013648 | -0.80183 | 1.743313 | Up-regulated |
| RCN3 | 0.013709 | -0.78025 | 1.71743 | Up-regulated |
| C7ORF41 | 0.013906 | -0.80108 | 1.742403 | Up-regulated |
| ETS1 | 0.01404 | -0.7963 | 1.736636 | Up-regulated |
| BLMH | 0.014085 | -0.81586 | 1.760352 | Up-regulated |
| CDC16 | 0.014114 | -0.82558 | 1.772243 | Up-regulated |
| CCDC48 | 0.014179 | -0.8038 | 1.745698 | Up-regulated |
| ABI3 | 0.0142 | -0.8014 | 1.742795 | Up-regulated |
| FKBP9 | 0.014214 | -0.79731 | 1.737862 | Up-regulated |
| MRPS6 | 0.014222 | -0.80448 | 1.746514 | Up-regulated |
| SHC3 | 0.014259 | -0.77605 | 1.712439 | Up-regulated |
| HARS2 | 0.014315 | -0.80807 | 1.750864 | Up-regulated |
| DUSP3 | 0.014566 | -0.82122 | 1.766904 | Up-regulated |
| FAM174A | 0.014642 | -0.8026 | 1.74424 | Up-regulated |

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|----------|----------|----------|----------|--------------|
| ATAD5 | 0.014643 | -0.82942 | 1.776977 | Up-regulated |
| PRR8 | 0.014664 | -0.8198 | 1.765166 | Up-regulated |
| UBE3C | 0.015047 | -0.79581 | 1.736049 | Up-regulated |
| ASTN1 | 0.015185 | -0.79744 | 1.738016 | Up-regulated |
| PKP4 | 0.015213 | -0.82712 | 1.774146 | Up-regulated |
| SFRS5 | 0.015302 | -0.73943 | 1.669513 | Up-regulated |
| NDUFA5 | 0.015509 | -0.81861 | 1.763707 | Up-regulated |
| RPS28 | 0.015662 | -0.7532 | 1.685531 | Up-regulated |
| FUK | 0.015724 | -0.7886 | 1.727397 | Up-regulated |
| C16ORF52 | 0.015908 | -0.81301 | 1.756873 | Up-regulated |
| DGKB | 0.015923 | -0.7958 | 1.736035 | Up-regulated |
| KLF2 | 0.015931 | -0.7884 | 1.727163 | Up-regulated |
| NISCH | 0.015979 | -0.80448 | 1.746516 | Up-regulated |
| LACE1 | 0.01598 | -0.79648 | 1.736857 | Up-regulated |
| FAM10A7 | 0.015991 | -0.81193 | 1.755554 | Up-regulated |
| HNRPH1 | 0.016048 | -0.73979 | 1.669928 | Up-regulated |
| RARA | 0.016146 | -0.77569 | 1.712012 | Up-regulated |
| CCDC63 | 0.016261 | -0.75882 | 1.69211 | Up-regulated |
| UBE2J1 | 0.016275 | -0.76498 | 1.699344 | Up-regulated |
| MCFD2 | 0.016289 | -0.80719 | 1.749797 | Up-regulated |
| C17ORF85 | 0.016439 | -0.75348 | 1.685858 | Up-regulated |
| FBXO17 | 0.016492 | -0.79783 | 1.738488 | Up-regulated |
| MAPKSP1 | 0.01656 | -0.79168 | 1.731086 | Up-regulated |
| COL6A2 | 0.016617 | -0.79632 | 1.736668 | Up-regulated |
| DEGS1 | 0.016634 | -0.783 | 1.7207 | Up-regulated |
| BTAF1 | 0.016726 | -0.70115 | 1.625796 | Up-regulated |
| ZNF354A | 0.016787 | -0.80682 | 1.749346 | Up-regulated |
| SCARNA5 | 0.016793 | -0.78443 | 1.722408 | Up-regulated |
| FAM53A | 0.016797 | -0.77668 | 1.713189 | Up-regulated |
| SGCA | 0.0168 | -0.79498 | 1.735051 | Up-regulated |
| GPN2 | 0.016831 | -0.70286 | 1.627733 | Up-regulated |
| HNRNPH1 | 0.016868 | -0.80621 | 1.74861 | Up-regulated |
| LTB | 0.016875 | -0.77815 | 1.714934 | Up-regulated |
| C17ORF70 | 0.016951 | -0.81897 | 1.764142 | Up-regulated |
| C10RF162 | 0.016954 | -0.78344 | 1.721229 | Up-regulated |
| RPS6KB2 | 0.016955 | -0.7824 | 1.719985 | Up-regulated |
| U2AF2 | 0.016961 | -0.76843 | 1.703417 | Up-regulated |
| SLC26A6 | 0.016977 | -0.73106 | 1.659855 | Up-regulated |
| RAB3IL1 | 0.017104 | -0.722 | 1.649469 | Up-regulated |
| ASXL2 | 0.01716 | -0.76784 | 1.702721 | Up-regulated |
| KIAA1919 | 0.017183 | -0.79883 | 1.739694 | Up-regulated |
| RPS8 | 0.01722 | -0.78857 | 1.72736 | Up-regulated |
| CD14 | 0.01724 | -0.81214 | 1.755815 | Up-regulated |
| TMEM115 | 0.017435 | -0.75382 | 1.686248 | Up-regulated |
| COL13A1 | 0.017578 | -0.77558 | 1.711882 | Up-regulated |
| CD7 | 0.017706 | -0.76847 | 1.703466 | Up-regulated |
| SLN | 0.017815 | -0.76399 | 1.698178 | Up-regulated |
| ALDH4A1 | 0.017876 | -0.79453 | 1.734507 | Up-regulated |
| C11ORF80 | 0.017949 | -0.76447 | 1.69875 | Up-regulated |
| NIPSNAP2 | 0.018148 | -0.76666 | 1.70133 | Up-regulated |
| RPS6 | 0.018172 | -0.77817 | 1.714959 | Up-regulated |
| PTOV1 | 0.018183 | -0.6786 | 1.600585 | Up-regulated |
| LOC10021 | 0.01831 | -0.77925 | 1.716234 | Up-regulated |
| MAML3 | 0.01835 | -0.77554 | 1.71183 | Up-regulated |
| C14ORF10 | 0.018503 | -0.78375 | 1.721601 | Up-regulated |
| FXC1 | 0.018577 | -0.777 | 1.713569 | Up-regulated |

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|----------|----------|----------|----------|--------------|
| SYPL1 | 0.018609 | -0.76743 | 1.702231 | Up-regulated |
| TSHZ3 | 0.018622 | -0.73985 | 1.669999 | Up-regulated |
| TRPC4AP | 0.018645 | -0.76034 | 1.693887 | Up-regulated |
| TRIM55 | 0.018753 | -0.70867 | 1.634296 | Up-regulated |
| HADHA | 0.018754 | -0.78025 | 1.717429 | Up-regulated |
| GPR116 | 0.018761 | -0.77843 | 1.715264 | Up-regulated |
| EHD1 | 0.01892 | -0.79635 | 1.736706 | Up-regulated |
| ADAM15 | 0.019044 | -0.76036 | 1.693908 | Up-regulated |
| MAP4 | 0.0191 | -0.76135 | 1.695071 | Up-regulated |
| PGGT1B | 0.019122 | -0.79548 | 1.73566 | Up-regulated |
| MYL12A | 0.019205 | -0.80188 | 1.743377 | Up-regulated |
| 6-Mar | 0.019249 | -0.80051 | 1.741715 | Up-regulated |
| IL18BP | 0.019314 | -0.74475 | 1.675686 | Up-regulated |
| HLA-DME | 0.019672 | -0.78274 | 1.72039 | Up-regulated |
| SNORA5C | 0.019985 | -0.7876 | 1.726206 | Up-regulated |
| TMEM47 | 0.020042 | -0.798 | 1.738684 | Up-regulated |
| FAM69B | 0.020073 | -0.74722 | 1.678552 | Up-regulated |
| DCXR | 0.020156 | -0.75332 | 1.685669 | Up-regulated |
| PLD6 | 0.020189 | -0.79412 | 1.734019 | Up-regulated |
| UBE2MP1 | 0.020336 | -0.71289 | 1.639085 | Up-regulated |
| POLN | 0.020584 | -0.78016 | 1.71732 | Up-regulated |
| GLTSCR2 | 0.020618 | -0.78504 | 1.723143 | Up-regulated |
| CIB2 | 0.02069 | -0.75403 | 1.686493 | Up-regulated |
| SCARNA2 | 0.0207 | -0.72913 | 1.657638 | Up-regulated |
| LIMS1 | 0.020701 | -0.77889 | 1.715812 | Up-regulated |
| PSKH1 | 0.020722 | -0.746 | 1.677135 | Up-regulated |
| ZNF845 | 0.020735 | -0.77283 | 1.708623 | Up-regulated |
| RER1 | 0.020769 | -0.76493 | 1.699292 | Up-regulated |
| ITGA8 | 0.020885 | -0.73921 | 1.669264 | Up-regulated |
| FUT10 | 0.021037 | -0.78175 | 1.719219 | Up-regulated |
| GLIPR2 | 0.021079 | -0.71233 | 1.638445 | Up-regulated |
| NELF | 0.021135 | -0.7694 | 1.70456 | Up-regulated |
| SNORD77 | 0.021213 | -0.77387 | 1.709846 | Up-regulated |
| EDC3 | 0.021266 | -0.77538 | 1.71164 | Up-regulated |
| MATN3 | 0.021288 | -0.77238 | 1.70809 | Up-regulated |
| ADD1 | 0.021343 | -0.76769 | 1.702541 | Up-regulated |
| FBRS | 0.021376 | -0.72817 | 1.656535 | Up-regulated |
| C1QBP | 0.02141 | -0.76703 | 1.701758 | Up-regulated |
| C14ORF14 | 0.021885 | -0.7639 | 1.698073 | Up-regulated |
| SRPR | 0.021956 | -0.74184 | 1.672311 | Up-regulated |
| ZBTB8A | 0.022155 | -0.76062 | 1.694215 | Up-regulated |
| PRSS27 | 0.022202 | -0.7531 | 1.685411 | Up-regulated |
| C20ORF19 | 0.022466 | -0.75757 | 1.690642 | Up-regulated |
| BBS5 | 0.022477 | -0.78022 | 1.717397 | Up-regulated |
| HDAC2 | 0.022563 | -0.7789 | 1.715827 | Up-regulated |
| PDS5B | 0.022574 | -0.72292 | 1.650515 | Up-regulated |
| CNTNAP1 | 0.022661 | -0.70307 | 1.627964 | Up-regulated |
| SYF2 | 0.02276 | -0.7325 | 1.661516 | Up-regulated |
| SNORD6 | 0.022801 | -0.766 | 1.700545 | Up-regulated |
| ACAN | 0.022811 | -0.74934 | 1.681028 | Up-regulated |
| ARAF | 0.022837 | -0.76415 | 1.698374 | Up-regulated |
| WWP1 | 0.022871 | -0.75402 | 1.686482 | Up-regulated |
| ANKDD1L | 0.022885 | -0.75973 | 1.693178 | Up-regulated |
| C16ORF34 | 0.023042 | -0.74972 | 1.681463 | Up-regulated |
| TUBB2C | 0.023111 | -0.71842 | 1.645383 | Up-regulated |
| PPP1R14A | 0.023128 | -0.78267 | 1.720306 | Up-regulated |

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| AGL | 0.023187 | -0.74399 | 1.674796 | Up-regulated |
| SFRS11 | 0.02321 | -0.78075 | 1.71802 | Up-regulated |
| PICK1 | 0.023231 | -0.76813 | 1.703063 | Up-regulated |
| FAM126A | 0.023237 | -0.75944 | 1.692838 | Up-regulated |
| ITM2A | 0.023291 | -0.75605 | 1.688859 | Up-regulated |
| MAP3K10 | 0.023342 | -0.75887 | 1.692161 | Up-regulated |
| CLEC16A | 0.023425 | -0.71959 | 1.646714 | Up-regulated |
| THAP1 | 0.023569 | -0.77276 | 1.708535 | Up-regulated |
| RPS16 | 0.023575 | -0.74464 | 1.675559 | Up-regulated |
| ACTN4 | 0.023714 | -0.77116 | 1.706643 | Up-regulated |
| BCKDHA | 0.023878 | -0.73439 | 1.663698 | Up-regulated |
| BTG2 | 0.02392 | -0.76421 | 1.69844 | Up-regulated |
| ABCE1 | 0.023937 | -0.76149 | 1.695244 | Up-regulated |
| VAMP1 | 0.024036 | -0.73526 | 1.664697 | Up-regulated |
| TAGLN | 0.024089 | -0.74605 | 1.677192 | Up-regulated |
| CPSF1 | 0.024137 | -0.77901 | 1.71595 | Up-regulated |
| LOC10014 | 0.024142 | -0.7478 | 1.679234 | Up-regulated |
| APBA3 | 0.024194 | -0.73973 | 1.669866 | Up-regulated |
| SH3BGR1 | 0.024253 | -0.71614 | 1.642777 | Up-regulated |
| SNORD59 | 0.024298 | -0.74077 | 1.671073 | Up-regulated |
| HSD17B1 | 0.02432 | -0.76996 | 1.705218 | Up-regulated |
| SCCPDH | 0.024449 | -0.75982 | 1.693284 | Up-regulated |
| AUTS2 | 0.024482 | -0.69332 | 1.617002 | Up-regulated |
| HLA-B | 0.024583 | -0.72063 | 1.647902 | Up-regulated |
| ZRANB1 | 0.024585 | -0.71932 | 1.646407 | Up-regulated |
| HOXB8 | 0.024689 | -0.73942 | 1.669504 | Up-regulated |
| ASAP3 | 0.02475 | -0.72253 | 1.650075 | Up-regulated |
| Septin 2 | 0.02484 | -0.72247 | 1.650008 | Up-regulated |
| PHF14 | 0.024946 | -0.74165 | 1.672088 | Up-regulated |
| FAM193B | 0.024974 | -0.74352 | 1.674255 | Up-regulated |
| ADAM17 | 0.025025 | -0.76245 | 1.69637 | Up-regulated |
| HSPB6 | 0.025674 | -0.75625 | 1.689092 | Up-regulated |
| ZNF174 | 0.025765 | -0.71262 | 1.638776 | Up-regulated |
| IAH1 | 0.025774 | -0.74326 | 1.673952 | Up-regulated |
| FAM133B | 0.02596 | -0.74108 | 1.671422 | Up-regulated |
| PAQR4 | 0.026078 | -0.73038 | 1.65908 | Up-regulated |
| KIF20B | 0.02615 | -0.75627 | 1.689113 | Up-regulated |
| TLR8 | 0.026182 | -0.72671 | 1.654859 | Up-regulated |
| HNRNPH1 | 0.026355 | -0.74682 | 1.678086 | Up-regulated |
| ETFB | 0.026661 | -0.71448 | 1.640887 | Up-regulated |
| LIME1 | 0.026664 | -0.75726 | 1.690277 | Up-regulated |
| ERCC5 | 0.026682 | -0.7234 | 1.651074 | Up-regulated |
| GALK1 | 0.026826 | -0.7202 | 1.647411 | Up-regulated |
| TRAPPC1 | 0.026839 | -0.68921 | 1.612396 | Up-regulated |
| LAMC3 | 0.02692 | -0.71563 | 1.642195 | Up-regulated |
| SAMD9 | 0.027022 | -0.72414 | 1.651913 | Up-regulated |
| FTSJD1 | 0.027025 | -0.73753 | 1.667324 | Up-regulated |
| HKR1 | 0.02703 | -0.73935 | 1.669424 | Up-regulated |
| FAM53B | 0.027425 | -0.72844 | 1.656846 | Up-regulated |
| DIO3OS | 0.027608 | -0.72228 | 1.649783 | Up-regulated |
| RIF1 | 0.027665 | -0.73424 | 1.663515 | Up-regulated |
| DLC1 | 0.027675 | -0.74606 | 1.677205 | Up-regulated |
| ARHGEF1 | 0.027755 | -0.73776 | 1.667581 | Up-regulated |
| FOXO4 | 0.027756 | -0.73748 | 1.667263 | Up-regulated |
| TYK2 | 0.027764 | -0.68488 | 1.607564 | Up-regulated |
| TAS2R49 | 0.027799 | -0.74293 | 1.673576 | Up-regulated |

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| ZNF813 | 0.027812 | -0.74488 | 1.67583 | Up-regulated |
| KLHL5 | 0.02784 | -0.69697 | 1.621092 | Up-regulated |
| LRRC52 | 0.028037 | -0.74747 | 1.678847 | Up-regulated |
| RFXANK | 0.028207 | -0.72701 | 1.655209 | Up-regulated |
| PAR1 | 0.028227 | -0.74376 | 1.674536 | Up-regulated |
| DZIP1 | 0.028245 | -0.73409 | 1.663351 | Up-regulated |
| LRFN1 | 0.028254 | -0.73412 | 1.663381 | Up-regulated |
| RNF113A | 0.028372 | -0.71963 | 1.646763 | Up-regulated |
| TLN1 | 0.028383 | -0.70014 | 1.624659 | Up-regulated |
| PCDHGC3 | 0.028385 | -0.75077 | 1.68269 | Up-regulated |
| NAPRT1 | 0.028455 | -0.65688 | 1.576674 | Up-regulated |
| C20ORF10 | 0.028511 | -0.72404 | 1.651806 | Up-regulated |
| SYVN1 | 0.028542 | -0.74621 | 1.677385 | Up-regulated |
| ENPEP | 0.028779 | -0.71448 | 1.640889 | Up-regulated |
| TFE3 | 0.028908 | -0.725 | 1.652903 | Up-regulated |
| LRRC14 | 0.028927 | -0.70075 | 1.625346 | Up-regulated |
| WDR51B | 0.028949 | -0.74817 | 1.679665 | Up-regulated |
| DHRS3 | 0.029014 | -0.72436 | 1.652172 | Up-regulated |
| LOC72933 | 0.029014 | -0.72067 | 1.647948 | Up-regulated |
| ZNF418 | 0.029164 | -0.75181 | 1.683903 | Up-regulated |
| ACBD3 | 0.029262 | -0.74152 | 1.671935 | Up-regulated |
| CARM1 | 0.029391 | -0.75128 | 1.683281 | Up-regulated |
| CLCN7 | 0.029417 | -0.75211 | 1.68426 | Up-regulated |
| NSUN4 | 0.029752 | -0.73834 | 1.668258 | Up-regulated |
| POLR2J2 | 0.029815 | -0.71309 | 1.639316 | Up-regulated |
| C4A | 0.029997 | -0.73197 | 1.660908 | Up-regulated |
| CACNA2I | 0.030064 | -0.6784 | 1.600369 | Up-regulated |
| LOC88523 | 0.030073 | -0.6999 | 1.62439 | Up-regulated |
| NFAT5 | 0.030102 | -0.70961 | 1.63536 | Up-regulated |
| GUK1 | 0.030129 | -0.73842 | 1.668349 | Up-regulated |
| YWHAG | 0.030157 | -0.73287 | 1.661937 | Up-regulated |
| SLC26A3 | 0.030195 | -0.58759 | 1.502732 | Up-regulated |
| SLC35A2 | 0.03026 | -0.66487 | 1.585423 | Up-regulated |
| ABI3BP | 0.0303 | -0.71252 | 1.638663 | Up-regulated |
| ZBTB45 | 0.030376 | -0.72113 | 1.648473 | Up-regulated |
| RIMS2 | 0.030516 | -0.74 | 1.670172 | Up-regulated |
| NOTCH1 | 0.030548 | -0.7269 | 1.655084 | Up-regulated |
| APOC1 | 0.030717 | -0.71886 | 1.645885 | Up-regulated |
| PPARBP | 0.030754 | -0.70841 | 1.634004 | Up-regulated |
| VPS37C | 0.030807 | -0.65081 | 1.570047 | Up-regulated |
| GGA2 | 0.030921 | -0.72207 | 1.649548 | Up-regulated |
| PPM1B | 0.030992 | -0.69677 | 1.620871 | Up-regulated |
| ZMIZ2 | 0.03101 | -0.71596 | 1.642572 | Up-regulated |
| ZBTB4 | 0.031062 | -0.68213 | 1.604509 | Up-regulated |
| ACTN3 | 0.031216 | -0.6492 | 1.5683 | Up-regulated |
| CHRNA1 | 0.031236 | -0.72722 | 1.655445 | Up-regulated |
| C10RF52 | 0.031268 | -0.67199 | 1.593271 | Up-regulated |
| ASPN | 0.031312 | -0.70977 | 1.635545 | Up-regulated |
| FLNC | 0.031456 | -0.73707 | 1.666789 | Up-regulated |
| RBPMS2 | 0.031559 | -0.69241 | 1.61598 | Up-regulated |
| DGKQ | 0.031573 | -0.69591 | 1.619901 | Up-regulated |
| RBMS2 | 0.031624 | -0.70832 | 1.633904 | Up-regulated |
| LACTB2 | 0.031765 | -0.69538 | 1.619314 | Up-regulated |
| STAT6 | 0.031794 | -0.68593 | 1.608741 | Up-regulated |
| QRICH1 | 0.031844 | -0.70126 | 1.625921 | Up-regulated |
| PPP2CA | 0.031861 | -0.68466 | 1.607323 | Up-regulated |

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| SH3BP4 | 0.031874 | -0.71324 | 1.639482 | Up-regulated |
| TRAF6 | 0.031877 | -0.70026 | 1.624798 | Up-regulated |
| ATP13A1 | 0.031881 | -0.66617 | 1.586854 | Up-regulated |
| CD99L2 | 0.031903 | -0.73098 | 1.659764 | Up-regulated |
| DMAP1 | 0.032044 | -0.72565 | 1.653648 | Up-regulated |
| SNORD30 | 0.032195 | -0.72906 | 1.657562 | Up-regulated |
| LONRF1 | 0.03224 | -0.69183 | 1.615333 | Up-regulated |
| GSTM3 | 0.032248 | -0.72004 | 1.647231 | Up-regulated |
| PREX2 | 0.032267 | -0.71154 | 1.637548 | Up-regulated |
| XPO4 | 0.032267 | -0.67134 | 1.59255 | Up-regulated |
| EML3 | 0.032281 | -0.61831 | 1.535071 | Up-regulated |
| HEBP1 | 0.032303 | -0.63641 | 1.554462 | Up-regulated |
| P15RS | 0.032318 | -0.69547 | 1.619414 | Up-regulated |
| FLJ39061 | 0.032322 | -0.71045 | 1.636313 | Up-regulated |
| E4F1 | 0.032568 | -0.67833 | 1.600287 | Up-regulated |
| AASS | 0.032639 | -0.68996 | 1.613233 | Up-regulated |
| ANGEL2 | 0.032903 | -0.72281 | 1.650398 | Up-regulated |
| HK2 | 0.032917 | -0.73626 | 1.66585 | Up-regulated |
| PLAC9 | 0.032919 | -0.72474 | 1.652605 | Up-regulated |
| CCDC24 | 0.032944 | -0.6307 | 1.548314 | Up-regulated |
| CD3E | 0.03296 | -0.72296 | 1.650559 | Up-regulated |
| CALM1 | 0.033012 | -0.70678 | 1.632159 | Up-regulated |
| ZNF140 | 0.033025 | -0.72338 | 1.651049 | Up-regulated |
| MTF2 | 0.033085 | -0.73093 | 1.65971 | Up-regulated |
| NFKBIL2 | 0.033093 | -0.70986 | 1.635644 | Up-regulated |
| ZNF195 | 0.033183 | -0.71427 | 1.640657 | Up-regulated |
| COPS7A | 0.03328 | -0.67644 | 1.598191 | Up-regulated |
| STOM | 0.033284 | -0.69663 | 1.620718 | Up-regulated |
| GSDMD | 0.033442 | -0.62759 | 1.544979 | Up-regulated |
| MS4A4A | 0.033457 | -0.70824 | 1.633806 | Up-regulated |
| CAPZB | 0.033488 | -0.70653 | 1.631878 | Up-regulated |
| TMEM79 | 0.033512 | -0.66393 | 1.584396 | Up-regulated |
| QPRT | 0.033535 | -0.72124 | 1.648602 | Up-regulated |
| KIAA1522 | 0.033601 | -0.72571 | 1.65372 | Up-regulated |
| INTS8 | 0.033633 | -0.65725 | 1.577075 | Up-regulated |
| SNORA18 | 0.033654 | -0.70638 | 1.631705 | Up-regulated |
| ACTA2 | 0.033702 | -0.71407 | 1.640422 | Up-regulated |
| CD99 | 0.033786 | -0.70981 | 1.635588 | Up-regulated |
| BPHL | 0.033922 | -0.65819 | 1.578101 | Up-regulated |
| RAB40B | 0.033986 | -0.72768 | 1.655975 | Up-regulated |
| PAN3 | 0.034165 | -0.68614 | 1.608971 | Up-regulated |
| DUSP23 | 0.034259 | -0.7253 | 1.653239 | Up-regulated |
| TSPYL1 | 0.034287 | -0.70641 | 1.631734 | Up-regulated |
| GAS7 | 0.034301 | -0.69835 | 1.622643 | Up-regulated |
| RAB11FIF | 0.034312 | -0.68282 | 1.60527 | Up-regulated |
| ATG12 | 0.034451 | -0.72489 | 1.652771 | Up-regulated |
| RNU6AT2 | 0.03452 | -0.69322 | 1.616884 | Up-regulated |
| VWF | 0.034669 | -0.72905 | 1.657546 | Up-regulated |
| NFATC3 | 0.034733 | -0.70091 | 1.625526 | Up-regulated |
| YIPF4 | 0.034752 | -0.7129 | 1.639093 | Up-regulated |
| PARP8 | 0.034776 | -0.69282 | 1.616445 | Up-regulated |
| GPR179 | 0.034964 | -0.71894 | 1.645973 | Up-regulated |
| IQCC | 0.035218 | -0.68212 | 1.604494 | Up-regulated |
| BRP44L | 0.035249 | -0.65186 | 1.571194 | Up-regulated |
| CLDN5 | 0.03529 | -0.67302 | 1.594409 | Up-regulated |
| CAST | 0.03538 | -0.70329 | 1.628215 | Up-regulated |

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| SRPRB | 0.035409 | -0.69386 | 1.617609 | Up-regulated |
| SNHG8 | 0.035425 | -0.68409 | 1.606686 | Up-regulated |
| MT1X | 0.035464 | -0.7006 | 1.625179 | Up-regulated |
| Septin 7 | 0.035561 | -0.69565 | 1.619615 | Up-regulated |
| CLEC14A | 0.035564 | -0.70213 | 1.626907 | Up-regulated |
| GNB2L1 | 0.035658 | -0.71283 | 1.639018 | Up-regulated |
| DBNL | 0.035798 | -0.66304 | 1.583419 | Up-regulated |
| NXF3 | 0.035824 | -0.67378 | 1.595243 | Up-regulated |
| METRNL | 0.036243 | -0.63709 | 1.555184 | Up-regulated |
| EDNRA | 0.03637 | -0.70467 | 1.629772 | Up-regulated |
| SPIN4 | 0.036426 | -0.64939 | 1.568508 | Up-regulated |
| ZNF777 | 0.036459 | -0.70909 | 1.634772 | Up-regulated |
| C2ORF63 | 0.036726 | -0.66013 | 1.58023 | Up-regulated |
| SNORA3 | 0.036969 | -0.71854 | 1.645519 | Up-regulated |
| BTG1 | 0.036991 | -0.66974 | 1.590784 | Up-regulated |
| C14ORF17 | 0.037003 | -0.66052 | 1.580656 | Up-regulated |
| RHCE | 0.03711 | -0.6925 | 1.61608 | Up-regulated |
| DOCK2 | 0.037159 | -0.71615 | 1.642787 | Up-regulated |
| CRBN | 0.037172 | -0.70833 | 1.633908 | Up-regulated |
| EHD2 | 0.037183 | -0.71962 | 1.646748 | Up-regulated |
| NSFL1C | 0.03723 | -0.68453 | 1.607182 | Up-regulated |
| PPM1M | 0.037275 | -0.72075 | 1.648044 | Up-regulated |
| TUFM | 0.037311 | -0.72117 | 1.648517 | Up-regulated |
| RABL3 | 0.037339 | -0.69208 | 1.615608 | Up-regulated |
| ALDH3A1 | 0.037387 | -0.68776 | 1.610777 | Up-regulated |
| C11ORF85 | 0.037402 | -0.70564 | 1.630867 | Up-regulated |
| TMEM222 | 0.037455 | -0.66787 | 1.58872 | Up-regulated |
| SNORA1 | 0.037661 | -0.6869 | 1.609823 | Up-regulated |
| RPUSD4 | 0.037662 | -0.71277 | 1.638947 | Up-regulated |
| TERC | 0.037873 | -0.70726 | 1.6327 | Up-regulated |
| FLJ36070 | 0.03791 | -0.67274 | 1.594096 | Up-regulated |
| LMCD1 | 0.037943 | -0.70817 | 1.633731 | Up-regulated |
| SLC19A2 | 0.038141 | -0.70465 | 1.629746 | Up-regulated |
| UROS | 0.038142 | -0.66224 | 1.582535 | Up-regulated |
| TMEM205 | 0.038144 | -0.70568 | 1.630912 | Up-regulated |
| DIO3 | 0.038166 | -0.68452 | 1.607162 | Up-regulated |
| AICDA | 0.038189 | -0.66039 | 1.580512 | Up-regulated |
| BRD4 | 0.038258 | -0.67078 | 1.591932 | Up-regulated |
| NGDN | 0.038297 | -0.68492 | 1.607609 | Up-regulated |
| GIMAP4 | 0.038376 | -0.70994 | 1.635741 | Up-regulated |
| S1PR4 | 0.038424 | -0.6792 | 1.601253 | Up-regulated |
| PLOD1 | 0.038451 | -0.65408 | 1.573616 | Up-regulated |
| RFWD2 | 0.038452 | -0.67783 | 1.599736 | Up-regulated |
| DNAJB11 | 0.038542 | -0.69881 | 1.62317 | Up-regulated |
| CNNM3 | 0.038596 | -0.64693 | 1.565831 | Up-regulated |
| TAF1L | 0.038692 | -0.68853 | 1.61164 | Up-regulated |
| RBM24 | 0.038774 | -0.65577 | 1.575461 | Up-regulated |
| TSPAN31 | 0.038827 | -0.67355 | 1.594993 | Up-regulated |
| C7ORF50 | 0.03889 | -0.61695 | 1.533629 | Up-regulated |
| HSFX1 | 0.038968 | -0.69708 | 1.621225 | Up-regulated |
| XLKD1 | 0.039051 | -0.70511 | 1.630265 | Up-regulated |
| ADAMTS1 | 0.039299 | -0.66568 | 1.586313 | Up-regulated |
| UBN1 | 0.039313 | -0.68691 | 1.609834 | Up-regulated |
| ASGR1 | 0.039401 | -0.69729 | 1.621461 | Up-regulated |
| PANX2 | 0.039462 | -0.68676 | 1.609669 | Up-regulated |
| RDH11 | 0.039504 | -0.68876 | 1.611899 | Up-regulated |

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| FAM98A | 0.039627 | -0.70085 | 1.625462 | Up-regulated |
| FLJ21986 | 0.039639 | -0.64272 | 1.561269 | Up-regulated |
| PLAC4 | 0.039746 | -0.68548 | 1.608235 | Up-regulated |
| SLC25A11 | 0.039866 | -0.64782 | 1.5668 | Up-regulated |
| TIMP2 | 0.040099 | -0.70224 | 1.62703 | Up-regulated |
| SEC31A | 0.040258 | -0.67469 | 1.596251 | Up-regulated |
| EGLN3 | 0.040277 | -0.68176 | 1.604091 | Up-regulated |
| TTK | 0.040368 | -0.70075 | 1.625344 | Up-regulated |
| IL11RA | 0.040399 | -0.68047 | 1.602663 | Up-regulated |
| GPRC5B | 0.040448 | -0.68587 | 1.60867 | Up-regulated |
| CCNK | 0.040457 | -0.66435 | 1.584851 | Up-regulated |
| PPP2R3A | 0.040458 | -0.69836 | 1.622664 | Up-regulated |
| SPP2 | 0.040517 | -0.69749 | 1.621686 | Up-regulated |
| METAP2 | 0.040612 | -0.70905 | 1.634727 | Up-regulated |
| SRRM2 | 0.040667 | -0.6942 | 1.617988 | Up-regulated |
| UTP23 | 0.0407 | -0.67692 | 1.598724 | Up-regulated |
| ADAMTS1 | 0.040722 | -0.6956 | 1.619556 | Up-regulated |
| FAM47E | 0.040729 | -0.58945 | 1.504673 | Up-regulated |
| PIGV | 0.040742 | -0.68927 | 1.612468 | Up-regulated |
| SLC35B4 | 0.040772 | -0.67713 | 1.59896 | Up-regulated |
| ARHGDI2 | 0.040868 | -0.70311 | 1.628009 | Up-regulated |
| METRNL | 0.040895 | -0.62147 | 1.538444 | Up-regulated |
| PNMAL1 | 0.040923 | -0.63724 | 1.555349 | Up-regulated |
| MAGED4 | 0.040928 | -0.67568 | 1.59735 | Up-regulated |
| SLC5A6 | 0.040982 | -0.67698 | 1.59879 | Up-regulated |
| SNORD34 | 0.041097 | -0.67908 | 1.601116 | Up-regulated |
| FLJ35409 | 0.041166 | -0.6228 | 1.539859 | Up-regulated |
| NDRG3 | 0.04126 | -0.67554 | 1.597198 | Up-regulated |
| CREB3L3 | 0.041297 | -0.66621 | 1.586904 | Up-regulated |
| IFITM1 | 0.04144 | -0.6364 | 1.554445 | Up-regulated |
| AKR1C2 | 0.041557 | -0.69287 | 1.616498 | Up-regulated |
| DDHD2 | 0.04171 | -0.66561 | 1.586234 | Up-regulated |
| DPYD | 0.041724 | -0.68807 | 1.611122 | Up-regulated |
| CYSLTR1 | 0.041745 | -0.67111 | 1.592301 | Up-regulated |
| CSNK1G2 | 0.041786 | -0.64951 | 1.56863 | Up-regulated |
| PIP4K2B | 0.041811 | -0.65261 | 1.572007 | Up-regulated |
| SNORD60 | 0.041814 | -0.70186 | 1.626599 | Up-regulated |
| ANKK1 | 0.041847 | -0.69803 | 1.622287 | Up-regulated |
| MYO7A | 0.04185 | -0.69687 | 1.620987 | Up-regulated |
| FUS | 0.041882 | -0.68314 | 1.60563 | Up-regulated |
| MED13L | 0.041946 | -0.67766 | 1.59954 | Up-regulated |
| RNF186 | 0.042136 | -0.68935 | 1.612556 | Up-regulated |
| SNORD95 | 0.042162 | -0.63931 | 1.557587 | Up-regulated |
| FSD1 | 0.042326 | -0.69768 | 1.621894 | Up-regulated |
| MPZL2 | 0.042372 | -0.66474 | 1.585278 | Up-regulated |
| SLC2A6 | 0.042495 | -0.64989 | 1.569044 | Up-regulated |
| FLJ22184 | 0.042525 | -0.64584 | 1.564645 | Up-regulated |
| SNORD50 | 0.042595 | -0.69585 | 1.619839 | Up-regulated |
| ISG20 | 0.042696 | -0.69315 | 1.616808 | Up-regulated |
| FLJ35390 | 0.042701 | -0.6793 | 1.601367 | Up-regulated |
| PLA2G16 | 0.042812 | -0.68309 | 1.605574 | Up-regulated |
| VIPR1 | 0.042851 | -0.67338 | 1.594805 | Up-regulated |
| C16ORF58 | 0.042913 | -0.70329 | 1.628208 | Up-regulated |
| CC2D2A | 0.043098 | -0.6913 | 1.614735 | Up-regulated |
| PROM2 | 0.043143 | -0.66446 | 1.584971 | Up-regulated |
| PTBP1 | 0.043312 | -0.70144 | 1.626125 | Up-regulated |

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| KCNF1 | 0.04339 | -0.67871 | 1.600708 | Up-regulated |
| ZNF420 | 0.043448 | -0.67774 | 1.599629 | Up-regulated |
| HSP90AA | 0.043561 | -0.64465 | 1.563361 | Up-regulated |
| SFMBT2 | 0.04364 | -0.65995 | 1.580028 | Up-regulated |
| TMEM179 | 0.043655 | -0.67825 | 1.6002 | Up-regulated |
| TSPAN1 | 0.043722 | -0.66998 | 1.591047 | Up-regulated |
| DDX20 | 0.043756 | -0.65729 | 1.577113 | Up-regulated |
| SNORD74 | 0.043865 | -0.68343 | 1.605952 | Up-regulated |
| SLC44A2 | 0.043887 | -0.61445 | 1.530974 | Up-regulated |
| PNPLA7 | 0.043998 | -0.6663 | 1.587 | Up-regulated |
| JUND | 0.044017 | -0.6935 | 1.617199 | Up-regulated |
| MED19 | 0.044059 | -0.66839 | 1.5893 | Up-regulated |
| BLM | 0.044097 | -0.69236 | 1.61592 | Up-regulated |
| NKTR | 0.044344 | -0.63622 | 1.55425 | Up-regulated |
| TPH1 | 0.044376 | -0.66496 | 1.585528 | Up-regulated |
| PRCP | 0.044606 | -0.6355 | 1.553471 | Up-regulated |
| LOC65331 | 0.044695 | -0.69675 | 1.620852 | Up-regulated |
| OSGEPL1 | 0.044801 | -0.68105 | 1.603305 | Up-regulated |
| RGS1 | 0.044883 | -0.68679 | 1.609702 | Up-regulated |
| C19ORF4 | 0.044954 | -0.6404 | 1.558757 | Up-regulated |
| UCK2 | 0.045053 | -0.69342 | 1.617108 | Up-regulated |
| SUMF2 | 0.045084 | -0.6957 | 1.619666 | Up-regulated |
| CYP4V2 | 0.045289 | -0.63687 | 1.554948 | Up-regulated |
| CRABP2 | 0.0453 | -0.65289 | 1.57231 | Up-regulated |
| GPBP1 | 0.045441 | -0.67911 | 1.601156 | Up-regulated |
| PATE2 | 0.045596 | -0.68344 | 1.605968 | Up-regulated |
| MXRA7 | 0.045696 | -0.67109 | 1.592273 | Up-regulated |
| NRAS | 0.045785 | -0.67675 | 1.598533 | Up-regulated |
| TXNDC5 | 0.045804 | -0.64341 | 1.562014 | Up-regulated |
| KIAA1875 | 0.045861 | -0.6842 | 1.606806 | Up-regulated |
| RPN2 | 0.046002 | -0.66519 | 1.58578 | Up-regulated |
| NLN | 0.046044 | -0.66149 | 1.581716 | Up-regulated |
| SNORA36 | 0.046048 | -0.67539 | 1.597031 | Up-regulated |
| DICER1 | 0.046072 | -0.68561 | 1.608379 | Up-regulated |
| TMEM141 | 0.046076 | -0.62207 | 1.539086 | Up-regulated |
| DPYS | 0.046253 | -0.66884 | 1.58979 | Up-regulated |
| TNFRSF4 | 0.046275 | -0.67372 | 1.59518 | Up-regulated |
| SNORA61 | 0.046417 | -0.69255 | 1.61614 | Up-regulated |
| ZNF493 | 0.046534 | -0.66097 | 1.581143 | Up-regulated |
| HEXDC | 0.046537 | -0.67266 | 1.59401 | Up-regulated |
| SNURF | 0.046768 | -0.64537 | 1.564143 | Up-regulated |
| TIMELES | 0.046873 | -0.64685 | 1.565746 | Up-regulated |
| DPYSL4 | 0.046929 | -0.65369 | 1.573187 | Up-regulated |
| YBX2 | 0.047019 | -0.67872 | 1.600715 | Up-regulated |
| CD4 | 0.047151 | -0.67896 | 1.600981 | Up-regulated |
| CAPN2 | 0.047253 | -0.6512 | 1.570478 | Up-regulated |
| ELOVL4 | 0.04731 | -0.61836 | 1.53513 | Up-regulated |
| METTL13 | 0.047385 | -0.6879 | 1.610938 | Up-regulated |
| VIM | 0.047388 | -0.66456 | 1.585089 | Up-regulated |
| SPRY2 | 0.047398 | -0.65657 | 1.57633 | Up-regulated |
| AGFG1 | 0.047416 | -0.65426 | 1.573811 | Up-regulated |
| WDR75 | 0.047417 | -0.66904 | 1.590011 | Up-regulated |
| ATF2 | 0.047436 | -0.65851 | 1.578457 | Up-regulated |
| LOC40098 | 0.047502 | -0.68192 | 1.604269 | Up-regulated |
| RPS4Y2 | 0.047533 | -0.66597 | 1.586633 | Up-regulated |
| NDUFS3 | 0.047533 | -0.67087 | 1.592033 | Up-regulated |

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| SLC43A3 | 0.047536 | -0.65596 | 1.57566 | Up-regulated |
| PRKAR1A | 0.047634 | -0.68054 | 1.602739 | Up-regulated |
| C10RF17 | 0.047638 | -0.66978 | 1.590829 | Up-regulated |
| LSP1 | 0.047804 | -0.67065 | 1.591794 | Up-regulated |
| BTF3 | 0.04789 | -0.65859 | 1.578536 | Up-regulated |
| GYLTL1B | 0.047994 | -0.64866 | 1.567716 | Up-regulated |
| HTATIP2 | 0.048503 | -0.66699 | 1.587753 | Up-regulated |
| KRTCAP3 | 0.048522 | -0.60875 | 1.524934 | Up-regulated |
| FAM13B | 0.048779 | -0.65411 | 1.573641 | Up-regulated |
| GTPBP3 | 0.048786 | -0.68059 | 1.602798 | Up-regulated |
| BCLAF1 | 0.048902 | -0.63949 | 1.557776 | Up-regulated |
| RHOBTB1 | 0.049014 | -0.64787 | 1.566859 | Up-regulated |
| CBS | 0.049261 | -0.67114 | 1.592334 | Up-regulated |
| NAV1 | 0.049263 | -0.66756 | 1.588383 | Up-regulated |
| FAM193A | 0.049269 | -0.65902 | 1.57901 | Up-regulated |
| ZNF323 | 0.049419 | -0.66811 | 1.588986 | Up-regulated |
| NT5DC1 | 0.049566 | -0.67964 | 1.601739 | Up-regulated |
| LZTR1 | 0.049856 | -0.60184 | 1.517654 | Up-regulated |
| SNORD11 | 0.049908 | -0.63276 | 1.550527 | Up-regulated |
| TNPO1 | 0.049992 | -0.65605 | 1.575758 | Up-regulated |
| HEATR3 | 0.00049 | 1.026639 | 2.037272 | Down-regulated |
| ZSCAN2 | 0.000712 | 0.989663 | 1.985721 | Down-regulated |
| SILV | 0.00152 | 1.03675 | 2.051601 | Down-regulated |
| CSPG5 | 0.001786 | 1.010684 | 2.014867 | Down-regulated |
| ABCA2 | 0.001833 | 0.880448 | 1.840947 | Down-regulated |
| GMIP | 0.002445 | 0.940925 | 1.919758 | Down-regulated |
| ATP6V1E | 0.002457 | 1.008648 | 2.012024 | Down-regulated |
| ANKRD5 | 0.002822 | 0.934141 | 1.910753 | Down-regulated |
| ENOPH1 | 0.002959 | 0.941027 | 1.919895 | Down-regulated |
| NTN1 | 0.003137 | 0.924047 | 1.89743 | Down-regulated |
| PITPNC1 | 0.004121 | 0.88897 | 1.851854 | Down-regulated |
| DYRK3 | 0.004437 | 0.916883 | 1.888032 | Down-regulated |
| PKIB | 0.004618 | 0.908126 | 1.876607 | Down-regulated |
| EHBP1 | 0.004762 | 0.872261 | 1.830529 | Down-regulated |
| PSORS1C | 0.0053 | 0.836916 | 1.786228 | Down-regulated |
| EXOG | 0.005811 | 0.798745 | 1.739588 | Down-regulated |
| VSTM2 | 0.005874 | 0.886799 | 1.849069 | Down-regulated |
| ZNF785 | 0.005926 | 0.849831 | 1.802289 | Down-regulated |
| ZMYND1 | 0.006087 | 0.895549 | 1.860318 | Down-regulated |
| C14ORF10 | 0.00609 | 0.887804 | 1.850357 | Down-regulated |
| TRIM44 | 0.00624 | 0.864518 | 1.820731 | Down-regulated |
| UCKL1 | 0.006269 | 0.899754 | 1.865748 | Down-regulated |
| MIR155HC | 0.006295 | 0.874539 | 1.833422 | Down-regulated |
| PCK2 | 0.006598 | 0.812799 | 1.756616 | Down-regulated |
| WISP3 | 0.007677 | 0.865606 | 1.822105 | Down-regulated |
| MAP2K1 | 0.007824 | 0.885997 | 1.848041 | Down-regulated |
| ETS2 | 0.008009 | 0.891212 | 1.854733 | Down-regulated |
| AK3L1 | 0.008027 | 0.887221 | 1.84961 | Down-regulated |
| PODXL | 0.008076 | 0.890177 | 1.853404 | Down-regulated |
| IDH3A | 0.008085 | 0.861407 | 1.81681 | Down-regulated |
| SLCO4C1 | 0.008153 | 0.739326 | 1.669395 | Down-regulated |
| DSCR3 | 0.008167 | 0.826782 | 1.773724 | Down-regulated |
| GAP43 | 0.00842 | 0.783355 | 1.721129 | Down-regulated |
| HIST4H4 | 0.008614 | 0.873315 | 1.831867 | Down-regulated |
| PHAX | 0.008784 | 0.827347 | 1.774419 | Down-regulated |
| ANAPC2 | 0.008859 | 0.855651 | 1.809575 | Down-regulated |

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| NCAPH | 0.009024 | 0.827587 | 1.774714 | Down-regulated |
| GLB1L3 | 0.009096 | 0.867531 | 1.824538 | Down-regulated |
| AFM | 0.009149 | 0.825835 | 1.77256 | Down-regulated |
| AFMID | 0.009296 | 0.822101 | 1.767978 | Down-regulated |
| EYA2 | 0.009525 | 0.849678 | 1.802098 | Down-regulated |
| PCNA | 0.009897 | 0.833321 | 1.781782 | Down-regulated |
| KIF15 | 0.009898 | 0.801322 | 1.742697 | Down-regulated |
| HSD17B1 | 0.009936 | 0.767505 | 1.702324 | Down-regulated |
| RASSF1 | 0.009937 | 0.853775 | 1.807223 | Down-regulated |
| ID2 | 0.010133 | 0.833543 | 1.782056 | Down-regulated |
| NCOA6 | 0.010202 | 0.870826 | 1.82871 | Down-regulated |
| ICAM3 | 0.010386 | 0.796134 | 1.736441 | Down-regulated |
| MYST3 | 0.010675 | 0.835754 | 1.784789 | Down-regulated |
| AGXT | 0.010779 | 0.820424 | 1.765925 | Down-regulated |
| NUDT21 | 0.010848 | 0.820331 | 1.765812 | Down-regulated |
| MIP | 0.011666 | 0.774577 | 1.710689 | Down-regulated |
| FLRT3 | 0.011722 | 0.765258 | 1.699674 | Down-regulated |
| PSME2 | 0.012001 | 0.8468 | 1.798507 | Down-regulated |
| SDHA | 0.012195 | 0.851021 | 1.803777 | Down-regulated |
| LOC40149 | 0.01263 | 0.833524 | 1.782033 | Down-regulated |
| C16ORF7 | 0.012933 | 0.813404 | 1.757353 | Down-regulated |
| MIR27A | 0.01297 | 0.704905 | 1.630038 | Down-regulated |
| ERF | 0.012993 | 0.802292 | 1.74387 | Down-regulated |
| ARSD | 0.013054 | 0.815555 | 1.759975 | Down-regulated |
| MBP | 0.013514 | 0.830209 | 1.777942 | Down-regulated |
| RNF213 | 0.013997 | 0.744338 | 1.675206 | Down-regulated |
| ENPP6 | 0.013998 | 0.826046 | 1.77282 | Down-regulated |
| OR5T2 | 0.01421 | 0.677254 | 1.599093 | Down-regulated |
| PTPRH | 0.014393 | 0.824686 | 1.771149 | Down-regulated |
| SSX4B | 0.014474 | 0.770804 | 1.70622 | Down-regulated |
| FLJ45121 | 0.014665 | 0.810298 | 1.753573 | Down-regulated |
| OSCAR | 0.015098 | 0.818292 | 1.763318 | Down-regulated |
| CENTB2 | 0.015336 | 0.702515 | 1.627339 | Down-regulated |
| UCK1 | 0.015409 | 0.816244 | 1.760816 | Down-regulated |
| CCNE1 | 0.015505 | 0.744333 | 1.6752 | Down-regulated |
| SLC22A14 | 0.015708 | 0.685332 | 1.608072 | Down-regulated |
| HAUS8 | 0.015802 | 0.794125 | 1.734025 | Down-regulated |
| WDR31 | 0.015915 | 0.689129 | 1.61231 | Down-regulated |
| UTS2D | 0.016587 | 0.777489 | 1.714145 | Down-regulated |
| CCNB2 | 0.016899 | 0.774887 | 1.711056 | Down-regulated |
| C20ORF10 | 0.017089 | 0.78776 | 1.726392 | Down-regulated |
| HS2ST1 | 0.017108 | 0.763824 | 1.697985 | Down-regulated |
| AP2A2 | 0.017264 | 0.722303 | 1.649814 | Down-regulated |
| POP5 | 0.017514 | 0.760817 | 1.69445 | Down-regulated |
| MGC7085 | 0.017633 | 0.794469 | 1.734439 | Down-regulated |
| MIR920 | 0.017771 | 0.762537 | 1.696472 | Down-regulated |
| Septin 3 | 0.017787 | 0.798361 | 1.739124 | Down-regulated |
| MFSD9 | 0.017819 | 0.769437 | 1.704605 | Down-regulated |
| C1ORF14 | 0.017843 | 0.69187 | 1.615376 | Down-regulated |
| PPP2R2C | 0.018368 | 0.743201 | 1.673886 | Down-regulated |
| MEOX1 | 0.018423 | 0.744955 | 1.675922 | Down-regulated |
| SERPINB1 | 0.018463 | 0.772573 | 1.708314 | Down-regulated |
| SLC25A36 | 0.018485 | 0.767389 | 1.702186 | Down-regulated |
| C1ORF9 | 0.018547 | 0.735302 | 1.664745 | Down-regulated |
| NCAPH2 | 0.019018 | 0.755916 | 1.688703 | Down-regulated |
| SI | 0.019057 | 0.777359 | 1.713991 | Down-regulated |

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| GLB1L | 0.019069 | 0.688299 | 1.611382 | Down-regulated |
| TMEM12C | 0.01918 | 0.771408 | 1.706935 | Down-regulated |
| C9ORF66 | 0.019227 | 0.747259 | 1.678601 | Down-regulated |
| DGCR6 | 0.019668 | 0.802129 | 1.743672 | Down-regulated |
| NPTX1 | 0.01967 | 0.783386 | 1.721165 | Down-regulated |
| MRPL48 | 0.019779 | 0.776586 | 1.713073 | Down-regulated |
| LOC44142 | 0.019808 | 0.768629 | 1.70365 | Down-regulated |
| MMRN1 | 0.019903 | 0.782009 | 1.719523 | Down-regulated |
| C3ORF65 | 0.020079 | 0.756002 | 1.688804 | Down-regulated |
| MGC1192 | 0.020246 | 0.76141 | 1.695146 | Down-regulated |
| SLC22A3 | 0.020296 | 0.717137 | 1.643916 | Down-regulated |
| LOC44195 | 0.020318 | 0.781701 | 1.719156 | Down-regulated |
| MGC6210 | 0.020697 | 0.637924 | 1.556088 | Down-regulated |
| TOP1 | 0.020703 | 0.733401 | 1.662554 | Down-regulated |
| CDC73 | 0.020722 | 0.778667 | 1.715545 | Down-regulated |
| SLC10A7 | 0.020847 | 0.771847 | 1.707454 | Down-regulated |
| KIAA1279 | 0.021183 | 0.781782 | 1.719253 | Down-regulated |
| CYP2R1 | 0.02122 | 0.634757 | 1.552677 | Down-regulated |
| EZH2 | 0.02124 | 0.768615 | 1.703633 | Down-regulated |
| LOC73083 | 0.021418 | 0.669209 | 1.590201 | Down-regulated |
| STX8 | 0.021454 | 0.634261 | 1.552142 | Down-regulated |
| C17ORF41 | 0.021555 | 0.766047 | 1.700604 | Down-regulated |
| HNRPR | 0.021679 | 0.732434 | 1.66144 | Down-regulated |
| B3GNTL1 | 0.02172 | 0.716456 | 1.643141 | Down-regulated |
| PDSS1 | 0.021802 | 0.653888 | 1.573403 | Down-regulated |
| TP53INP2 | 0.021816 | 0.72256 | 1.650108 | Down-regulated |
| ARMC7 | 0.021871 | 0.765749 | 1.700252 | Down-regulated |
| DCAF7 | 0.021938 | 0.742113 | 1.672624 | Down-regulated |
| GOLGB1 | 0.021941 | 0.759397 | 1.692783 | Down-regulated |
| CCDC73 | 0.021981 | 0.780552 | 1.717788 | Down-regulated |
| PC | 0.022357 | 0.769197 | 1.70432 | Down-regulated |
| GAS8 | 0.022657 | 0.714082 | 1.640439 | Down-regulated |
| SMPDL3A | 0.023069 | 0.754 | 1.686462 | Down-regulated |
| SERPINB1 | 0.023178 | 0.757556 | 1.690624 | Down-regulated |
| GPR37L1 | 0.023398 | 0.745169 | 1.676171 | Down-regulated |
| GZMH | 0.0234 | 0.758491 | 1.69172 | Down-regulated |
| KIAA0652 | 0.023832 | 0.637033 | 1.555127 | Down-regulated |
| FLJ46010 | 0.024218 | 0.76374 | 1.697886 | Down-regulated |
| CASS4 | 0.024341 | 0.760916 | 1.694567 | Down-regulated |
| FLJ35024 | 0.024358 | 0.735655 | 1.665153 | Down-regulated |
| PHLPP2 | 0.024704 | 0.749768 | 1.681522 | Down-regulated |
| PROL1 | 0.024856 | 0.727329 | 1.655572 | Down-regulated |
| GPR171 | 0.02486 | 0.617621 | 1.534343 | Down-regulated |
| PPP2R5A | 0.025032 | 0.71797 | 1.644866 | Down-regulated |
| C20ORF14 | 0.025064 | 0.682957 | 1.605427 | Down-regulated |
| ATP6V0A | 0.025074 | 0.742504 | 1.673077 | Down-regulated |
| SMC6 | 0.025167 | 0.759552 | 1.692965 | Down-regulated |
| DGCR6L | 0.025281 | 0.765143 | 1.699539 | Down-regulated |
| TCEB3C | 0.025305 | 0.744484 | 1.675375 | Down-regulated |
| 1-Mar | 0.025624 | 0.717807 | 1.64468 | Down-regulated |
| ISLR2 | 0.025782 | 0.72505 | 1.652958 | Down-regulated |
| WDR5B | 0.025871 | 0.617315 | 1.534018 | Down-regulated |
| LRRTM3 | 0.026051 | 0.60482 | 1.520789 | Down-regulated |
| CYBB | 0.026077 | 0.601493 | 1.517286 | Down-regulated |
| C6ORF16 | 0.026121 | 0.72229 | 1.649799 | Down-regulated |
| TMEM75 | 0.026124 | 0.755136 | 1.68779 | Down-regulated |

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| OCIAD1 | 0.026154 | 0.750281 | 1.68212 | Down-regulated |
| LCE6A | 0.026173 | 0.738085 | 1.66796 | Down-regulated |
| PRAMEF1 | 0.026174 | 0.712418 | 1.638548 | Down-regulated |
| MBD2 | 0.026331 | 0.743451 | 1.674176 | Down-regulated |
| BCHE | 0.02667 | 0.754188 | 1.686682 | Down-regulated |
| NARFL | 0.026717 | 0.728174 | 1.656541 | Down-regulated |
| CEP97 | 0.026761 | 0.736148 | 1.665722 | Down-regulated |
| NETO1 | 0.026987 | 0.632718 | 1.550483 | Down-regulated |
| CDH12P | 0.027148 | 0.734335 | 1.66363 | Down-regulated |
| LYN | 0.027577 | 0.747891 | 1.679336 | Down-regulated |
| NCRNA0C | 0.027721 | 0.734231 | 1.663511 | Down-regulated |
| TDRD9 | 0.027851 | 0.732804 | 1.661866 | Down-regulated |
| KIAA1432 | 0.028229 | 0.705405 | 1.630602 | Down-regulated |
| ELF2 | 0.0283 | 0.706411 | 1.63174 | Down-regulated |
| LOC65069 | 0.028612 | 0.739048 | 1.669074 | Down-regulated |
| C4ORF15 | 0.028681 | 0.720408 | 1.647648 | Down-regulated |
| SLC5A10 | 0.028748 | 0.709505 | 1.635243 | Down-regulated |
| PANK4 | 0.029008 | 0.730173 | 1.658838 | Down-regulated |
| FRG2C | 0.029083 | 0.723967 | 1.651717 | Down-regulated |
| KIR2DS1 | 0.029282 | 0.707177 | 1.632607 | Down-regulated |
| KCNJ6 | 0.029414 | 0.720402 | 1.647641 | Down-regulated |
| DLGAP1 | 0.029867 | 0.740216 | 1.670426 | Down-regulated |
| NPTXR | 0.029915 | 0.611461 | 1.527806 | Down-regulated |
| TMEM144 | 0.030216 | 0.741523 | 1.67194 | Down-regulated |
| WDYHV1 | 0.030244 | 0.746908 | 1.678192 | Down-regulated |
| PPPDE2 | 0.030347 | 0.652107 | 1.571462 | Down-regulated |
| LOC14354 | 0.030677 | 0.677512 | 1.599379 | Down-regulated |
| LOC15153 | 0.030685 | 0.698418 | 1.622725 | Down-regulated |
| CENPA | 0.030713 | 0.725889 | 1.653919 | Down-regulated |
| ZMYND8 | 0.030749 | 0.71675 | 1.643476 | Down-regulated |
| PTPN22 | 0.030805 | 0.719882 | 1.647048 | Down-regulated |
| TAF1A | 0.030923 | 0.628356 | 1.545803 | Down-regulated |
| INTS10 | 0.031256 | 0.719318 | 1.646404 | Down-regulated |
| PIK3CD | 0.031403 | 0.737236 | 1.666979 | Down-regulated |
| CELSR1 | 0.031472 | 0.699973 | 1.624474 | Down-regulated |
| C15ORF53 | 0.031549 | 0.615889 | 1.532502 | Down-regulated |
| HNRNPK | 0.031579 | 0.662788 | 1.583139 | Down-regulated |
| MIR1913 | 0.031579 | 0.712216 | 1.638319 | Down-regulated |
| SDCBP | 0.031658 | 0.708115 | 1.633668 | Down-regulated |
| STYK1 | 0.03167 | 0.679031 | 1.601064 | Down-regulated |
| TCEB3CL | 0.031702 | 0.716464 | 1.64315 | Down-regulated |
| CDC7 | 0.031847 | 0.738474 | 1.66841 | Down-regulated |
| SEC16A | 0.031885 | 0.694956 | 1.618835 | Down-regulated |
| KRTDAP | 0.031915 | 0.725818 | 1.653839 | Down-regulated |
| TFIP11 | 0.031932 | 0.731164 | 1.659978 | Down-regulated |
| LOC65375 | 0.031954 | 0.733801 | 1.663015 | Down-regulated |
| PHACTR4 | 0.032348 | 0.722248 | 1.649751 | Down-regulated |
| SDHAF1 | 0.032364 | 0.695432 | 1.619369 | Down-regulated |
| TTL6 | 0.03258 | 0.730828 | 1.659591 | Down-regulated |
| FGFR4 | 0.03267 | 0.725412 | 1.653373 | Down-regulated |
| MIRLET71 | 0.032928 | 0.717318 | 1.644123 | Down-regulated |
| TSG1 | 0.032951 | 0.715341 | 1.641871 | Down-regulated |
| AFG3L1 | 0.033477 | 0.652917 | 1.572344 | Down-regulated |
| SPINK6 | 0.033586 | 0.607222 | 1.523323 | Down-regulated |
| RAD51L3 | 0.033712 | 0.6998 | 1.624279 | Down-regulated |
| HSD17B3 | 0.033783 | 0.721713 | 1.649139 | Down-regulated |

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| MRPL49 | 0.033891 | 0.718088 | 1.645 | Down-regulated |
| TRAPPC9 | 0.033979 | 0.688582 | 1.611699 | Down-regulated |
| FAM46B | 0.034007 | 0.660345 | 1.58046 | Down-regulated |
| SH3TC1 | 0.034036 | 0.723605 | 1.651303 | Down-regulated |
| WDR40A | 0.034057 | 0.624248 | 1.541407 | Down-regulated |
| MRPL9 | 0.03409 | 0.719454 | 1.646559 | Down-regulated |
| C19ORF40 | 0.034497 | 0.587109 | 1.502234 | Down-regulated |
| TNFRSF11 | 0.034518 | 0.724947 | 1.65284 | Down-regulated |
| LIM2 | 0.03453 | 0.701184 | 1.625838 | Down-regulated |
| OR4F3 | 0.034729 | 0.710558 | 1.636437 | Down-regulated |
| NR2E3 | 0.034785 | 0.712358 | 1.63848 | Down-regulated |
| SC4MOL | 0.034851 | 0.64074 | 1.559129 | Down-regulated |
| ARHGEF5 | 0.034951 | 0.694932 | 1.618808 | Down-regulated |
| UBR7 | 0.035144 | 0.721658 | 1.649076 | Down-regulated |
| THSD3 | 0.035297 | 0.711503 | 1.637509 | Down-regulated |
| CMTM2 | 0.035317 | 0.680192 | 1.602353 | Down-regulated |
| PACS2 | 0.035336 | 0.627805 | 1.545212 | Down-regulated |
| RCHY1 | 0.035376 | 0.688305 | 1.611389 | Down-regulated |
| COX17 | 0.03583 | 0.627943 | 1.54536 | Down-regulated |
| NUDT6 | 0.035879 | 0.701531 | 1.626229 | Down-regulated |
| TSPYL4 | 0.035886 | 0.677025 | 1.598839 | Down-regulated |
| LRRIQ1 | 0.03592 | 0.620782 | 1.537709 | Down-regulated |
| GRIK4 | 0.036005 | 0.716614 | 1.64332 | Down-regulated |
| PRDM5 | 0.036043 | 0.716522 | 1.643216 | Down-regulated |
| RAB40AL | 0.03643 | 0.701419 | 1.626103 | Down-regulated |
| GNE | 0.036445 | 0.679618 | 1.601716 | Down-regulated |
| CCDC107 | 0.036632 | 0.686522 | 1.609399 | Down-regulated |
| REXO1L1 | 0.036746 | 0.679103 | 1.601144 | Down-regulated |
| MSH5 | 0.036875 | 0.699174 | 1.623575 | Down-regulated |
| SLC5A1 | 0.036892 | 0.663584 | 1.584012 | Down-regulated |
| TRIM71 | 0.036958 | 0.7076 | 1.633085 | Down-regulated |
| TXNL4B | 0.037034 | 0.6434 | 1.562006 | Down-regulated |
| HCG3 | 0.037081 | 0.703025 | 1.627915 | Down-regulated |
| LPIN1 | 0.037102 | 0.646373 | 1.565229 | Down-regulated |
| ZNF658 | 0.037107 | 0.702572 | 1.627404 | Down-regulated |
| RAMP3 | 0.037156 | 0.597257 | 1.512837 | Down-regulated |
| LOC38982 | 0.037306 | 0.669161 | 1.590148 | Down-regulated |
| KIF25 | 0.037514 | 0.662774 | 1.583123 | Down-regulated |
| LYG2 | 0.037687 | 0.709069 | 1.634749 | Down-regulated |
| OXSM | 0.037692 | 0.706439 | 1.631772 | Down-regulated |
| DNMBP | 0.037983 | 0.701228 | 1.625888 | Down-regulated |
| RAB40A | 0.037985 | 0.700745 | 1.625343 | Down-regulated |
| C1ORF183 | 0.03805 | 0.705417 | 1.630616 | Down-regulated |
| RBM15B | 0.038156 | 0.621152 | 1.538103 | Down-regulated |
| C21ORF25 | 0.038256 | 0.646298 | 1.565147 | Down-regulated |
| SP3 | 0.038281 | 0.679578 | 1.601671 | Down-regulated |
| NFIA | 0.038434 | 0.595266 | 1.510751 | Down-regulated |
| MAN1B1 | 0.038471 | 0.697171 | 1.621323 | Down-regulated |
| MUDENG | 0.038536 | 0.681198 | 1.60347 | Down-regulated |
| ZNF835 | 0.038742 | 0.702293 | 1.627089 | Down-regulated |
| TBK1 | 0.038936 | 0.694709 | 1.618558 | Down-regulated |
| GRM3 | 0.039021 | 0.603942 | 1.519864 | Down-regulated |
| DECR2 | 0.039132 | 0.697457 | 1.621644 | Down-regulated |
| CACNA1C | 0.039244 | 0.661882 | 1.582146 | Down-regulated |
| LOC10012 | 0.039548 | 0.673132 | 1.594531 | Down-regulated |
| SCN2A | 0.039693 | 0.598054 | 1.513674 | Down-regulated |

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| OR8H2 | 0.03973 | 0.67334 | 1.594761 | Down-regulated |
| TRIP12 | 0.039945 | 0.671598 | 1.592836 | Down-regulated |
| AGTRAP | 0.040037 | 0.615451 | 1.532036 | Down-regulated |
| CST11 | 0.040159 | 0.64149 | 1.55994 | Down-regulated |
| PLK4 | 0.040175 | 0.609696 | 1.525938 | Down-regulated |
| WDR76 | 0.040215 | 0.701449 | 1.626137 | Down-regulated |
| ST6GAL1 | 0.040379 | 0.671569 | 1.592804 | Down-regulated |
| KRT17 | 0.040385 | 0.680391 | 1.602574 | Down-regulated |
| SPDYE1 | 0.04052 | 0.650201 | 1.569387 | Down-regulated |
| GNLY | 0.040544 | 0.702587 | 1.62742 | Down-regulated |
| FAM96A | 0.040755 | 0.692277 | 1.615832 | Down-regulated |
| SLC7A11 | 0.041097 | 0.662877 | 1.583237 | Down-regulated |
| YPEL2 | 0.041148 | 0.617229 | 1.533926 | Down-regulated |
| FAM22D | 0.041239 | 0.618999 | 1.535809 | Down-regulated |
| TCF2 | 0.041253 | 0.686909 | 1.60983 | Down-regulated |
| MGC1616 | 0.041342 | 0.5942 | 1.509635 | Down-regulated |
| SLC22A13 | 0.041358 | 0.692893 | 1.616522 | Down-regulated |
| NUMA1 | 0.041381 | 0.666629 | 1.58736 | Down-regulated |
| TMEM199 | 0.041382 | 0.696141 | 1.620165 | Down-regulated |
| LYNX1 | 0.041427 | 0.693969 | 1.617728 | Down-regulated |
| TMEM144 | 0.041468 | 0.692737 | 1.616347 | Down-regulated |
| DNAJC22 | 0.041527 | 0.690879 | 1.614267 | Down-regulated |
| PSMD10 | 0.041796 | 0.69825 | 1.622536 | Down-regulated |
| UNK | 0.041813 | 0.693582 | 1.617294 | Down-regulated |
| SLMAP | 0.041931 | 0.64104 | 1.559453 | Down-regulated |
| SLC12A1 | 0.042122 | 0.620342 | 1.53724 | Down-regulated |
| GLB1 | 0.042132 | 0.615203 | 1.531774 | Down-regulated |
| C9ORF125 | 0.042257 | 0.588408 | 1.503586 | Down-regulated |
| C10RF145 | 0.04232 | 0.641598 | 1.560057 | Down-regulated |
| RRAGA | 0.042322 | 0.657392 | 1.577229 | Down-regulated |
| SSX2 | 0.042373 | 0.649674 | 1.568814 | Down-regulated |
| COPS5 | 0.042587 | 0.679515 | 1.601601 | Down-regulated |
| ZNF121 | 0.042682 | 0.698237 | 1.622521 | Down-regulated |
| FOXL2 | 0.042719 | 0.628108 | 1.545536 | Down-regulated |
| LRRN4 | 0.042838 | 0.646429 | 1.565289 | Down-regulated |
| OXNAD1 | 0.04294 | 0.678017 | 1.599939 | Down-regulated |
| C16ORF55 | 0.043217 | 0.657636 | 1.577496 | Down-regulated |
| AGXT2 | 0.043245 | 0.661107 | 1.581295 | Down-regulated |
| IGSF9 | 0.043351 | 0.679537 | 1.601625 | Down-regulated |
| FCRL1 | 0.043381 | 0.696033 | 1.620044 | Down-regulated |
| FAM133A | 0.043623 | 0.669505 | 1.590527 | Down-regulated |
| OR8B4 | 0.043632 | 0.674131 | 1.595635 | Down-regulated |
| UGT2A3 | 0.043813 | 0.598438 | 1.514077 | Down-regulated |
| GPR128 | 0.043896 | 0.676862 | 1.598659 | Down-regulated |
| KCNC3 | 0.043977 | 0.598102 | 1.513724 | Down-regulated |
| HKDC1 | 0.044109 | 0.675412 | 1.597052 | Down-regulated |
| CNOT3 | 0.044249 | 0.673907 | 1.595387 | Down-regulated |
| SIVA1 | 0.04432 | 0.66572 | 1.58636 | Down-regulated |
| F9 | 0.044461 | 0.681252 | 1.60353 | Down-regulated |
| TCF20 | 0.044485 | 0.676533 | 1.598294 | Down-regulated |
| TAF11 | 0.044508 | 0.640527 | 1.558898 | Down-regulated |
| C18ORF2 | 0.044536 | 0.642831 | 1.56139 | Down-regulated |
| BAT5 | 0.044623 | 0.683014 | 1.605491 | Down-regulated |
| KCNQ1D1 | 0.044719 | 0.648864 | 1.567933 | Down-regulated |
| FXR2 | 0.044724 | 0.66935 | 1.590356 | Down-regulated |
| COPG2 | 0.045036 | 0.67629 | 1.598025 | Down-regulated |

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| SYN3 | 0.045303 | 0.68317 | 1.605664 | Down-regulated |
| MFSD8 | 0.045339 | 0.683968 | 1.606552 | Down-regulated |
| GPR75 | 0.045346 | 0.683417 | 1.605939 | Down-regulated |
| MAP3K4 | 0.045473 | 0.637347 | 1.555467 | Down-regulated |
| NPY1R | 0.045547 | 0.665925 | 1.586586 | Down-regulated |
| PINK1 | 0.045676 | 0.674645 | 1.596204 | Down-regulated |
| ZBED5 | 0.045723 | 0.619525 | 1.536369 | Down-regulated |
| AGR2 | 0.045761 | 0.67323 | 1.594639 | Down-regulated |
| PPL | 0.045761 | 0.687272 | 1.610236 | Down-regulated |
| CCDC74A | 0.046083 | 0.669916 | 1.59098 | Down-regulated |
| FLG2 | 0.046153 | 0.659409 | 1.579436 | Down-regulated |
| LOC55063 | 0.046221 | 0.677676 | 1.599561 | Down-regulated |
| GSS | 0.046757 | 0.672886 | 1.594259 | Down-regulated |
| MT1B | 0.04686 | 0.671986 | 1.593265 | Down-regulated |
| PRAMEF1 | 0.04692 | 0.621611 | 1.538592 | Down-regulated |
| SLC2A4 | 0.047027 | 0.628168 | 1.545601 | Down-regulated |
| POLR2D | 0.047125 | 0.67946 | 1.60154 | Down-regulated |
| TMEM149 | 0.047128 | 0.659013 | 1.579002 | Down-regulated |
| C16ORF70 | 0.047189 | 0.629945 | 1.547506 | Down-regulated |
| CCDC7 | 0.047266 | 0.684106 | 1.606707 | Down-regulated |
| ZNF836 | 0.04746 | 0.59837 | 1.514005 | Down-regulated |
| LOC12368 | 0.047472 | 0.664869 | 1.585424 | Down-regulated |
| CCR1 | 0.047472 | 0.635434 | 1.553405 | Down-regulated |
| CDKL2 | 0.047503 | 0.678174 | 1.600113 | Down-regulated |
| SENP8 | 0.047601 | 0.665393 | 1.586 | Down-regulated |
| CREB3L4 | 0.047659 | 0.683137 | 1.605627 | Down-regulated |
| KRTAP10 | 0.047989 | 0.669425 | 1.590438 | Down-regulated |
| KIAA2013 | 0.048065 | 0.665624 | 1.586255 | Down-regulated |
| MBD3L5 | 0.048271 | 0.662046 | 1.582325 | Down-regulated |
| FOXD4L1 | 0.048391 | 0.586153 | 1.501238 | Down-regulated |
| C1ORF64 | 0.048394 | 0.662358 | 1.582667 | Down-regulated |
| TYR | 0.048413 | 0.655531 | 1.575196 | Down-regulated |
| ZNF831 | 0.048433 | 0.680636 | 1.602846 | Down-regulated |
| SSX4 | 0.048448 | 0.626963 | 1.54431 | Down-regulated |
| CHEK2 | 0.048478 | 0.643411 | 1.562018 | Down-regulated |
| HTR7 | 0.048633 | 0.601435 | 1.517225 | Down-regulated |
| KRT85 | 0.048838 | 0.649076 | 1.568163 | Down-regulated |
| DDX60L | 0.048991 | 0.639786 | 1.558098 | Down-regulated |
| HPS4 | 0.048993 | 0.648192 | 1.567203 | Down-regulated |
| SATL1 | 0.049066 | 0.663086 | 1.583466 | Down-regulated |
| SENP5 | 0.049146 | 0.637742 | 1.555892 | Down-regulated |
| MGC8837 | 0.049217 | 0.594193 | 1.509628 | Down-regulated |
| ADAMTS | 0.049233 | 0.645205 | 1.563961 | Down-regulated |
| INTS4 | 0.049424 | 0.656107 | 1.575825 | Down-regulated |
| PELI2 | 0.049597 | 0.646649 | 1.565528 | Down-regulated |
| PDIA4 | 0.049657 | 0.669826 | 1.590881 | Down-regulated |
| SKAP1 | 0.049733 | 0.664573 | 1.585099 | Down-regulated |
| EFTUD2 | 0.049806 | 0.663709 | 1.58415 | Down-regulated |
| ARPM1 | 0.049824 | 0.679214 | 1.601267 | Down-regulated |
| FLJ20850 | 0.049832 | 0.650351 | 1.56955 | Down-regulated |
| IFIT2 | 0.04987 | 0.596234 | 1.511765 | Down-regulated |

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