**Table S2.** 122 EP-DEGs

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| symbol | logFC | AveExpr | t | P.Value | adj.P.Val | B | probe\_id | change |
| SEPTIN7 | -1.25728 | 5.09945 | -6.22026 | 2.29E-06 | 0.041227 | 4.521764 | 1565823\_at | down |
| CCL4 | -1.26889 | 10.74393 | -5.30897 | 2.10E-05 | 0.057254 | 2.655823 | 204103\_at | down |
| NPC1 | -0.72229 | 9.220229 | -5.17748 | 2.91E-05 | 0.057254 | 2.378156 | 202679\_at | down |
| GNLY | -1.20066 | 12.33341 | -5.13071 | 3.27E-05 | 0.057254 | 2.278975 | 205495\_s\_at | down |
| XCL1 | -0.89517 | 9.58335 | -5.12648 | 3.31E-05 | 0.057254 | 2.269996 | 206366\_x\_at | down |
| TLR3 | -0.59512 | 4.288854 | -5.08121 | 3.70E-05 | 0.057254 | 2.173796 | 239587\_at | down |
| RHOBTB3 | -0.95152 | 6.35046 | -5.04419 | 4.06E-05 | 0.057254 | 2.094982 | 225202\_at | down |
| PRSS23 | -1.24557 | 7.721436 | -5.03902 | 4.11E-05 | 0.057254 | 2.083972 | 202458\_at | down |
| PDGFD | -1.18932 | 6.839743 | -4.94596 | 5.18E-05 | 0.057827 | 1.885295 | 219304\_s\_at | down |
| SPON2 | -1.23398 | 9.784772 | -4.8279 | 6.96E-05 | 0.062139 | 1.632316 | 218638\_s\_at | down |
| CLIC3 | -1.1952 | 9.255811 | -4.80256 | 7.42E-05 | 0.062386 | 1.577904 | 219529\_at | down |
| CST7 | -0.82687 | 11.62872 | -4.62978 | 0.000114 | 0.075227 | 1.205807 | 210140\_at | down |
| ADGRG1 | -1.20647 | 10.48807 | -4.58859 | 0.000127 | 0.076147 | 1.116893 | 212070\_at | down |
| ST3GAL6 | 0.905882 | 6.612645 | 4.439737 | 0.000184 | 0.08867 | 0.795061 | 210942\_s\_at | up |
| TGFBR3 | -0.99733 | 9.825256 | -4.33061 | 0.000242 | 0.09548 | 0.558811 | 226625\_at | down |
| FGFBP2 | -1.14309 | 11.24159 | -4.32725 | 0.000244 | 0.09548 | 0.551528 | 223836\_at | down |
| ENPP4 | -0.64887 | 8.247445 | -4.29325 | 0.000266 | 0.099508 | 0.477882 | 204160\_s\_at | down |
| RRAS2 | -0.7857 | 8.007674 | -4.21068 | 0.000327 | 0.11004 | 0.299086 | 212589\_at | down |
| CTSW | -0.79907 | 9.391223 | -4.19442 | 0.00034 | 0.11076 | 0.26387 | 214450\_at | down |
| CCL5 | -0.65696 | 12.87329 | -4.1594 | 0.000371 | 0.115286 | 0.188068 | 204655\_at | down |
| TTC38 | -0.71825 | 8.758535 | -4.05211 | 0.000486 | 0.123736 | -0.04404 | 218272\_at | down |
| PAM | -0.5001 | 8.651778 | -3.99444 | 0.000561 | 0.12996 | -0.16863 | 212958\_x\_at | down |
| SLC4A4 | -0.69234 | 5.585399 | -3.96119 | 0.000609 | 0.135664 | -0.24041 | 203908\_at | down |
| ABCB1 | -0.81256 | 6.684789 | -3.84186 | 0.00082 | 0.150509 | -0.49749 | 209993\_at | down |
| CD180 | 0.573756 | 8.70741 | 3.781334 | 0.000953 | 0.155071 | -0.6275 | 206206\_at | up |
| ENTPD1 | 0.507153 | 7.255893 | 3.552449 | 0.001676 | 0.186821 | -1.11608 | 228585\_at | up |
| SYNE2 | -0.5194 | 10.23348 | -3.53186 | 0.001763 | 0.190093 | -1.15975 | 202761\_s\_at | down |
| ALOX5 | 0.623796 | 8.569538 | 3.471967 | 0.002041 | 0.202589 | -1.28641 | 214366\_s\_at | up |
| MARCKS | 0.663039 | 8.500347 | 3.417093 | 0.002333 | 0.21121 | -1.40201 | 201670\_s\_at | up |
| IL1RN | 0.702399 | 9.054195 | 3.402789 | 0.002416 | 0.213462 | -1.43207 | 212657\_s\_at | up |
| TNF | -0.68707 | 5.399312 | -3.3789 | 0.00256 | 0.215364 | -1.48219 | 1563357\_at | down |
| TRDV3 | -0.78225 | 10.74872 | -3.30322 | 0.003076 | 0.223947 | -1.64036 | 216191\_s\_at | down |
| HSPA6 | 0.862674 | 8.594302 | 3.286868 | 0.003199 | 0.228535 | -1.67439 | 117\_at | up |
| GNAQ | 0.513282 | 8.997993 | 3.265808 | 0.003366 | 0.231315 | -1.71816 | 224862\_at | up |
| COL6A3 | 0.587629 | 5.724477 | 3.245693 | 0.003533 | 0.235293 | -1.75988 | 201438\_at | up |
| STEAP4 | 1.123071 | 8.396264 | 3.24183 | 0.003566 | 0.236625 | -1.76788 | 225987\_at | up |
| AKR1C3 | -0.99941 | 8.196675 | -3.23261 | 0.003646 | 0.238059 | -1.78697 | 209160\_at | down |
| TRDC | -0.71062 | 11.19313 | -3.21767 | 0.003779 | 0.241111 | -1.81786 | 217143\_s\_at | down |
| CMTM2 | 1.490729 | 8.330089 | 3.173366 | 0.004203 | 0.247608 | -1.90923 | 229967\_at | up |
| CREB5 | 0.629618 | 7.795568 | 3.169447 | 0.004242 | 0.248334 | -1.91729 | 229228\_at | up |
| ACOT7 | -0.54069 | 7.293156 | -3.16781 | 0.004259 | 0.248672 | -1.92065 | 208002\_s\_at | down |
| COL18A1 | 0.559466 | 7.150518 | 3.163179 | 0.004306 | 0.249256 | -1.93018 | 209082\_s\_at | up |
| GK | 0.540698 | 6.131755 | 3.146608 | 0.00448 | 0.250188 | -1.9642 | 215977\_x\_at | up |
| IGHE | 0.752972 | 7.050039 | 3.127037 | 0.004694 | 0.254794 | -2.00431 | 1558438\_a\_at | up |
| GNAL | -0.67209 | 5.414597 | -3.10032 | 0.005002 | 0.25974 | -2.05893 | 213924\_at | down |
| IGFBP3 | -0.7751 | 5.70684 | -3.091 | 0.005114 | 0.261049 | -2.07795 | 210095\_s\_at | down |
| FOLR1 | -0.51134 | 9.532033 | -3.05048 | 0.00563 | 0.268531 | -2.16037 | 211074\_at | down |
| CHI3L1 | 1.868867 | 5.659535 | 3.048508 | 0.005656 | 0.268568 | -2.16437 | 209395\_at | up |
| ITGB8 | 0.630148 | 4.529261 | 3.03618 | 0.005824 | 0.271808 | -2.18936 | 226189\_at | up |
| IFNG | -1.05365 | 7.655877 | -3.02795 | 0.005938 | 0.27305 | -2.20603 | 210354\_at | down |
| IGKV1D-8 | 0.747265 | 5.81361 | 3.009885 | 0.006197 | 0.274253 | -2.24254 | 216517\_at | up |
| CPA3 | 0.805135 | 7.649736 | 2.944101 | 0.007232 | 0.288819 | -2.37481 | 205624\_at | up |
| PTPRO | 0.506263 | 6.362198 | 2.913085 | 0.007776 | 0.291407 | -2.43676 | 208121\_s\_at | up |
| RALB | 0.517781 | 7.076234 | 2.890481 | 0.008197 | 0.294844 | -2.48175 | 202101\_s\_at | up |
| GCA | 0.778468 | 10.36043 | 2.880661 | 0.008386 | 0.296621 | -2.50124 | 203765\_at | up |
| RPL14 | -1.0688 | 8.3836 | -2.84305 | 0.009151 | 0.306575 | -2.57565 | 219138\_at | down |
| CEACAM1 | 1.265562 | 6.245732 | 2.825738 | 0.009525 | 0.308088 | -2.60977 | 209498\_at | up |
| ENO1 | 0.908029 | 9.174397 | 2.825052 | 0.00954 | 0.308088 | -2.61112 | 217294\_s\_at | up |
| RAB27B | -0.63217 | 8.513719 | -2.80758 | 0.009933 | 0.310827 | -2.64546 | 228708\_at | down |
| CRYZ | -0.57581 | 8.567901 | -2.80237 | 0.010053 | 0.312166 | -2.65567 | 202950\_at | down |
| AREG | -1.61377 | 6.408612 | -2.77259 | 0.010766 | 0.318036 | -2.71392 | 205239\_at | down |
| SULF2 | 0.56537 | 8.458837 | 2.762012 | 0.01103 | 0.320463 | -2.73454 | 233555\_s\_at | up |
| BASP1 | 0.783248 | 10.33642 | 2.757182 | 0.011153 | 0.320774 | -2.74395 | 202391\_at | up |
| PYGL | 0.615741 | 9.535025 | 2.752651 | 0.011269 | 0.321351 | -2.75276 | 202990\_at | up |
| OSCAR | 0.52825 | 8.229043 | 2.729541 | 0.011881 | 0.326104 | -2.79762 | 1554503\_a\_at | up |
| VCAN | 0.505921 | 10.81087 | 2.687178 | 0.013085 | 0.328467 | -2.87939 | 215646\_s\_at | up |
| MME | 1.334347 | 5.92127 | 2.679249 | 0.013322 | 0.330401 | -2.89463 | 203435\_s\_at | up |
| STX3 | 0.567141 | 7.540595 | 2.655655 | 0.014054 | 0.334768 | -2.93984 | 235483\_at | up |
| S100P | 1.610712 | 8.671542 | 2.649184 | 0.014261 | 0.335504 | -2.95221 | 204351\_at | up |
| ACTN1 | 0.516178 | 9.569193 | 2.639391 | 0.01458 | 0.33763 | -2.97089 | 208637\_x\_at | up |
| UBE2D3 | 0.521661 | 9.444207 | 2.631286 | 0.014849 | 0.339971 | -2.98633 | 240383\_at | up |
| PTGDS | -0.88149 | 9.752765 | -2.63067 | 0.014869 | 0.340278 | -2.98751 | 212187\_x\_at | down |
| ADM | 0.962039 | 7.502865 | 2.575781 | 0.016819 | 0.35315 | -3.09142 | 202912\_at | up |
| THBS1 | 1.057498 | 6.408249 | 2.567513 | 0.017133 | 0.355751 | -3.10698 | 201110\_s\_at | up |
| GPRC5D | 0.504091 | 5.529991 | 2.539375 | 0.018242 | 0.362628 | -3.15973 | 221297\_at | up |
| TNFAIP6 | 1.502474 | 5.750585 | 2.525519 | 0.018812 | 0.364741 | -3.1856 | 206026\_s\_at | up |
| NAMPT | 1.123906 | 6.253743 | 2.524431 | 0.018858 | 0.364939 | -3.18762 | 1555167\_s\_at | up |
| PGLYRP1 | 1.095171 | 6.815575 | 2.494269 | 0.02016 | 0.369492 | -3.24365 | 207384\_at | up |
| LRG1 | 0.828058 | 6.725803 | 2.487384 | 0.020469 | 0.370332 | -3.25639 | 228648\_at | up |
| TNFAIP3 | -0.97067 | 11.85335 | -2.44046 | 0.022693 | 0.380908 | -3.3427 | 202644\_s\_at | down |
| QPCT | 0.523528 | 9.839381 | 2.430419 | 0.023197 | 0.382894 | -3.36106 | 205174\_s\_at | up |
| DYSF | 0.609593 | 8.779289 | 2.422654 | 0.023594 | 0.38508 | -3.37522 | 218660\_at | up |
| COL13A1 | -0.74188 | 4.69859 | -2.4131 | 0.024091 | 0.387838 | -3.39261 | 211343\_s\_at | down |
| SLPI | 1.344929 | 6.507303 | 2.401273 | 0.02472 | 0.389736 | -3.41409 | 203021\_at | up |
| CEACAM8 | 1.832535 | 7.276284 | 2.385223 | 0.025597 | 0.393644 | -3.44314 | 206676\_at | up |
| RPS19 | -1.10938 | 8.808188 | -2.37975 | 0.025903 | 0.395044 | -3.45302 | 202648\_at | down |
| PSMB4 | -0.88023 | 9.36969 | -2.35515 | 0.027318 | 0.400008 | -3.49726 | 228204\_at | down |
| RNASE3 | 1.329336 | 7.240786 | 2.319959 | 0.029468 | 0.407529 | -3.5601 | 206851\_at | up |
| LTF | 1.389846 | 9.89526 | 2.317468 | 0.029625 | 0.407529 | -3.56453 | 202018\_s\_at | up |
| CRISP3 | 1.067349 | 4.95485 | 2.313226 | 0.029896 | 0.407595 | -3.57206 | 207802\_at | up |
| NRG1 | 0.664364 | 6.346543 | 2.30719 | 0.030285 | 0.409552 | -3.58277 | 206237\_s\_at | up |
| MMP9 | 1.160685 | 7.824669 | 2.298892 | 0.030827 | 0.410259 | -3.59745 | 203936\_s\_at | up |
| ANXA3 | 1.451035 | 7.095654 | 2.269093 | 0.032848 | 0.418349 | -3.64994 | 209369\_at | up |
| NRF1 | 0.575242 | 5.836826 | 2.26412 | 0.033197 | 0.419151 | -3.65866 | 243189\_at | up |
| RETN | 1.053738 | 9.046851 | 2.259323 | 0.033537 | 0.420398 | -3.66706 | 220570\_at | up |
| IGKV1-17 | 1.156755 | 9.515493 | 2.242079 | 0.034784 | 0.425156 | -3.69716 | 211645\_x\_at | up |
| CAMP | 1.145696 | 9.250446 | 2.227976 | 0.035835 | 0.427792 | -3.72167 | 210244\_at | up |
| CA4 | 0.615866 | 4.684344 | 2.201977 | 0.037849 | 0.435327 | -3.76662 | 206209\_s\_at | up |
| CDC42 | -0.66533 | 10.33509 | -2.15088 | 0.042109 | 0.446399 | -3.85399 | 208727\_s\_at | down |
| LCN2 | 1.265292 | 8.738356 | 2.147877 | 0.042372 | 0.44724 | -3.85908 | 212531\_at | up |
| BPI | 1.177048 | 8.006459 | 2.131404 | 0.043843 | 0.45151 | -3.88694 | 205557\_at | up |
| HBD | 1.45914 | 7.785142 | 2.128271 | 0.044128 | 0.451563 | -3.89223 | 206834\_at | up |
| SELENBP1 | 0.946156 | 5.214175 | 2.123166 | 0.044596 | 0.452539 | -3.90082 | 214433\_s\_at | up |
| JCHAIN | 1.08212 | 12.25304 | 2.120629 | 0.04483 | 0.45327 | -3.90509 | 212592\_at | up |
| IGKC | 0.980467 | 9.353116 | 2.112877 | 0.045552 | 0.453378 | -3.91811 | 211643\_x\_at | up |
| ARG1 | 1.348389 | 6.250246 | 2.100477 | 0.046729 | 0.457761 | -3.93888 | 206177\_s\_at | up |
| CXCL1 | 0.869666 | 6.354103 | 2.075993 | 0.049134 | 0.464933 | -3.97964 | 204470\_at | up |
| CD160 | -1.47038 | 9.32804 | -5.88382 | 5.14E-06 | 0.041227 | 3.846011 | 207840\_at | down |
| GZMH | -1.15802 | 11.78606 | -4.93931 | 5.27E-05 | 0.057827 | 1.871089 | 210321\_at | down |
| GZMA | -0.82579 | 11.93547 | -4.74948 | 8.47E-05 | 0.064257 | 1.463771 | 205488\_at | down |
| NCAM1 | -1.03683 | 7.084053 | -4.01093 | 0.000538 | 0.127423 | -0.13302 | 227394\_at | down |
| B3GAT1 | -0.80286 | 7.617576 | -3.96568 | 0.000603 | 0.135664 | -0.23071 | 219521\_at | down |
| GZMB | -0.95371 | 11.80928 | -3.88342 | 0.00074 | 0.144198 | -0.40806 | 210164\_at | down |
| GFOD1 | -0.53882 | 8.464733 | -3.46002 | 0.002101 | 0.206645 | -1.31161 | 219821\_s\_at | down |
| ADGRE3 | 0.918966 | 6.406809 | 3.434854 | 0.002234 | 0.209275 | -1.36465 | 210724\_at | up |
| GZMK | -0.60187 | 10.89369 | -3.2398 | 0.003584 | 0.236997 | -1.77209 | 206666\_at | down |
| CSF2RA | 0.56935 | 6.435616 | 2.926778 | 0.007531 | 0.290004 | -2.40944 | 211287\_x\_at | up |
| GZMM | -0.63894 | 8.567099 | -2.85131 | 0.008978 | 0.304645 | -2.55935 | 207460\_at | down |
| LAIR2 | -0.82235 | 9.256874 | -2.69258 | 0.012925 | 0.327905 | -2.86899 | 207509\_s\_at | down |
| LILRA2 | 0.531145 | 9.275788 | 2.657588 | 0.013992 | 0.334672 | -2.93614 | 211100\_x\_at | up |
| MMP25 | 0.865212 | 7.67025 | 2.45417 | 0.022021 | 0.377846 | -3.31758 | 207890\_s\_at | up |
| PROK2 | 1.021552 | 7.672605 | 2.144539 | 0.042667 | 0.447841 | -3.86474 | 232629\_at | up |