**Table 1(a)** Differentially Expressed Genes (DEGs) (|Log2FoldChange| > 1 and False Discovery Rate (FDR) q-vaule < 0.05) of hcq vs con.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Log2FoldChange | Average Expression | FDR q-value |
| Downregulated | Sema6d | -2.708 | 43.993 | 0.041 |
|  | Asb2 | -1.129 | 193.018 | 0.044 |
|  |  |  |  |  |
| Upregulated | 9930111J21Rik2 | 1.008 | 289.948 | 0.000 |
|  | Oas3 | 1.013 | 1184.966 | 0.000 |
|  | Cxcl10 | 1.036 | 219.997 | 0.000 |
|  | Ifit3 | 1.051 | 129.065 | 0.038 |
|  | Phf11d | 1.058 | 228.378 | 0.000 |
|  | Gbp5 | 1.079 | 115.804 | 0.000 |
|  | Tgtp2 | 1.129 | 65.103 | 0.025 |
|  | Tgtp1 | 1.247 | 81.669 | 0.026 |
|  | Oas2 | 1.251 | 61.380 | 0.029 |

**Table 1(b)** Differentially Expressed Genes (DEGs) (|Log2FoldChange| > 1 and FDR q-vaule < 0.05) of pcq vs con.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Log2FoldChange | Average Expression | FDR q-value |
| Downregulated | Add2 | -6.065 | 11.377 | 0.009 |
|  | Dmp1 | -4.399 | 17.178 | 0.004 |
|  | Fetub | -4.102 | 11.315 | 0.005 |
|  | Ngfr | -3.598 | 18.332 | 0.024 |
|  | Parm1 | -3.590 | 16.318 | 0.045 |
|  | Lbp | -3.404 | 9.009 | 0.036 |
|  | Siglec15 | -3.373 | 12.387 | 0.010 |
|  | Bmper | -3.309 | 8.498 | 0.025 |
|  | Sod3 | -3.240 | 16.239 | 0.012 |
|  | Mcpt8 | -3.187 | 9.409 | 0.043 |
|  | Mmp3 | -2.970 | 476.818 | 0.001 |
|  | Tnip3 | -2.954 | 25.946 | 0.050 |
|  | Selp | -2.805 | 124.980 | 0.047 |
|  | Calr4 | -2.782 | 15.925 | 0.003 |
|  | Prelp | -2.690 | 8.093 | 0.036 |
|  | Eya2 | -2.646 | 434.347 | 0.026 |
|  | A530053M12Rik | -2.644 | 9.067 | 0.010 |
|  | Trib2 | -2.644 | 208.442 | 0.015 |
|  | Ace | -2.638 | 66.527 | 0.002 |
|  | Slc4a11 | -2.599 | 244.938 | 0.042 |
|  | Csn3 | -2.556 | 41.826 | 0.012 |
|  | Sema6d | -2.547 | 45.984 | 0.010 |
|  | Unc13c | -2.467 | 8.112 | 0.032 |
|  | Cd33 | -2.451 | 10.084 | 0.033 |
|  | Nlrp3 | -2.448 | 9.075 | 0.014 |
|  | Mmp13 | -2.432 | 133.788 | 0.000 |
|  | Hecw2 | -2.408 | 20.580 | 0.015 |
|  | Gm49937 | -2.401 | 7.837 | 0.034 |
|  | Gm9869 | -2.386 | 7.808 | 0.027 |
|  | Mgp | -2.385 | 21.308 | 0.022 |
|  | Krt13 | -2.368 | 26.897 | 0.030 |
|  | Ramp1 | -2.234 | 55.158 | 0.000 |
|  | C130074G19Rik | -2.213 | 22.886 | 0.039 |
|  | Sorbs3 | -2.181 | 34.695 | 0.001 |
|  | Mmp9 | -2.178 | 2867.793 | 0.000 |
|  | Stc1 | -2.067 | 175.837 | 0.000 |
|  | Adgrg3 | -2.045 | 84.008 | 0.006 |
|  | Gm10425 | -2.024 | 12.654 | 0.016 |
|  | Lcn2 | -2.014 | 2750.759 | 0.025 |
|  | Mmp10 | -1.995 | 56.755 | 0.002 |
|  | Kcnk2 | -1.980 | 135.077 | 0.000 |
|  | Klra2 | -1.973 | 24.564 | 0.010 |
|  | Gm19589 | -1.924 | 50.840 | 0.000 |
|  | Spry4 | -1.896 | 44.194 | 0.013 |
|  | Havcr2 | -1.887 | 35.891 | 0.042 |
|  | Ngef | -1.886 | 103.961 | 0.003 |
|  | Xlr | -1.871 | 13.806 | 0.030 |
|  | Cth | -1.850 | 109.353 | 0.017 |
|  | 1110002E22Rik | -1.806 | 16.066 | 0.039 |
|  | S100a4 | -1.774 | 18.060 | 0.046 |
|  | Padi3 | -1.757 | 302.107 | 0.002 |
|  | Rab7b | -1.756 | 57.324 | 0.000 |
|  | Areg | -1.739 | 100.890 | 0.016 |
|  | Ptx3 | -1.718 | 30.283 | 0.043 |
|  | Papln | -1.686 | 73.681 | 0.000 |
|  | Gm3716 | -1.673 | 21.576 | 0.003 |
|  | Dusp6 | -1.660 | 923.211 | 0.018 |
|  | Ccn3 | -1.655 | 83.510 | 0.026 |
|  | Psg17 | -1.651 | 30.930 | 0.047 |
|  | Evi2a | -1.642 | 14.122 | 0.044 |
|  | Angpt2 | -1.641 | 25.092 | 0.012 |
|  | Il18rap | -1.615 | 136.393 | 0.000 |
|  | Cdh17 | -1.583 | 39.916 | 0.040 |
|  | Gm2788 | -1.582 | 16.215 | 0.020 |
|  | Hs3st1 | -1.575 | 102.509 | 0.010 |
|  | Nmnat2 | -1.565 | 190.505 | 0.000 |
|  | Emilin2 | -1.556 | 27.075 | 0.016 |
|  | Baalc | -1.555 | 35.731 | 0.015 |
|  | Egr1 | -1.540 | 408.373 | 0.000 |
|  | Tenm4 | -1.536 | 118.293 | 0.019 |
|  | Ankrd37 | -1.535 | 56.030 | 0.000 |
|  | Platr22 | -1.533 | 19.551 | 0.050 |
|  | Prss22 | -1.512 | 695.809 | 0.000 |
|  | Asb2 | -1.499 | 184.503 | 0.000 |
|  | Chrna1os | -1.456 | 13.997 | 0.049 |
|  | Insig1 | -1.439 | 1217.510 | 0.000 |
|  | Camk2b | -1.438 | 57.966 | 0.000 |
|  | 1110008P14Rik | -1.408 | 522.316 | 0.001 |
|  | Adamtsl3 | -1.403 | 92.154 | 0.007 |
|  | Csf3 | -1.401 | 923.051 | 0.000 |
|  | Slc12a5 | -1.394 | 67.953 | 0.000 |
|  | Tfrc | -1.390 | 3466.144 | 0.000 |
|  | Etv5 | -1.388 | 434.200 | 0.001 |
|  | Acox2 | -1.381 | 74.179 | 0.001 |
|  | Cd38 | -1.369 | 55.288 | 0.022 |
|  | Il1r1 | -1.364 | 207.088 | 0.000 |
|  | Pcx | -1.361 | 69.059 | 0.008 |
|  | Irf8 | -1.356 | 199.950 | 0.006 |
|  | Itga1 | -1.350 | 136.219 | 0.017 |
|  | Fah | -1.327 | 478.268 | 0.000 |
|  | Steap4 | -1.310 | 104.766 | 0.005 |
|  | P2ry6 | -1.305 | 33.002 | 0.006 |
|  | Arrdc3 | -1.295 | 360.765 | 0.000 |
|  | Plac1 | -1.294 | 30.634 | 0.020 |
|  | Cp | -1.293 | 2218.722 | 0.001 |
|  | Shank2 | -1.292 | 45.676 | 0.036 |
|  | Prss12 | -1.278 | 517.819 | 0.003 |
|  | Morrbid | -1.257 | 116.286 | 0.005 |
|  | Pou2f2 | -1.251 | 73.318 | 0.006 |
|  | 4930556M19Rik | -1.235 | 79.105 | 0.011 |
|  | Dcxr | -1.234 | 83.697 | 0.010 |
|  | 1700007L15Rik | -1.227 | 21.357 | 0.039 |
|  | Tns1 | -1.215 | 84.970 | 0.001 |
|  | Oit3 | -1.203 | 28.990 | 0.040 |
|  | Raet1e | -1.199 | 41.085 | 0.047 |
|  | Arhgap18 | -1.191 | 772.966 | 0.000 |
|  | Gchfr | -1.188 | 182.693 | 0.000 |
|  | Lama3 | -1.187 | 686.836 | 0.003 |
|  | Map1a | -1.186 | 40.411 | 0.003 |
|  | Alcam | -1.186 | 574.014 | 0.000 |
|  | Slc22a15 | -1.184 | 87.386 | 0.018 |
|  | Etv1 | -1.183 | 653.822 | 0.000 |
|  | Rhox5 | -1.177 | 158.788 | 0.032 |
|  | Gm13387 | -1.176 | 181.136 | 0.005 |
|  | Padi2 | -1.169 | 743.438 | 0.017 |
|  | Gm37131 | -1.167 | 38.066 | 0.019 |
|  | Spry1 | -1.167 | 373.031 | 0.024 |
|  | Scd2 | -1.164 | 13502.870 | 0.000 |
|  | Hacl1 | -1.156 | 22.750 | 0.046 |
|  | Itgb2 | -1.154 | 1260.498 | 0.000 |
|  | Enpp1 | -1.150 | 188.426 | 0.004 |
|  | C1s1 | -1.143 | 162.729 | 0.004 |
|  | Styk1 | -1.122 | 133.446 | 0.000 |
|  | Kyat3 | -1.121 | 65.440 | 0.002 |
|  | Csgalnact1 | -1.118 | 180.389 | 0.031 |
|  | Apln | -1.115 | 659.323 | 0.000 |
|  | Agbl3 | -1.112 | 30.159 | 0.049 |
|  | Cyth4 | -1.110 | 24.225 | 0.046 |
|  | Mylk | -1.110 | 33.573 | 0.016 |
|  | Mamdc2 | -1.091 | 40.502 | 0.016 |
|  | Col7a1 | -1.067 | 628.708 | 0.000 |
|  | Odc1 | -1.060 | 5562.850 | 0.000 |
|  | mt-Tc | -1.051 | 48.070 | 0.008 |
|  | Nid1 | -1.042 | 85.004 | 0.010 |
|  | Gm7993 | -1.037 | 1276.666 | 0.000 |
|  | Adgrg1 | -1.027 | 103.424 | 0.024 |
|  | Lgr6 | -1.018 | 476.614 | 0.049 |
|  | Etv4 | -1.012 | 843.976 | 0.000 |
|  | Prkg2 | -1.008 | 1230.104 | 0.001 |
|  | Inpp4b | -1.008 | 151.882 | 0.000 |
|  | Mttp | -1.007 | 100.097 | 0.008 |
|  | Egln3 | -1.007 | 1273.049 | 0.000 |
|  | C3 | -1.002 | 10932.819 | 0.000 |
|  |  |  |  |  |
| Upregulated | Fam171b | 1.016 | 244.148 | 0.004 |
|  | Mb | 1.024 | 40.510 | 0.022 |
|  | Igtp | 1.033 | 293.991 | 0.000 |
|  | Xaf1 | 1.046 | 322.864 | 0.001 |
|  | Gbp2 | 1.047 | 974.189 | 0.000 |
|  | Mmp15 | 1.048 | 321.145 | 0.000 |
|  | Adam8 | 1.067 | 1145.909 | 0.000 |
|  | Coq8a | 1.093 | 179.144 | 0.000 |
|  | Tgtp2 | 1.096 | 65.905 | 0.012 |
|  | Grhl1 | 1.102 | 33.748 | 0.046 |
|  | Ddx60 | 1.108 | 408.362 | 0.000 |
|  | Gbp2b | 1.114 | 685.490 | 0.000 |
|  | Oasl2 | 1.125 | 1457.549 | 0.000 |
|  | Icam1 | 1.137 | 429.342 | 0.021 |
|  | Zbtb7c | 1.151 | 46.346 | 0.046 |
|  | Rtp4 | 1.155 | 537.907 | 0.000 |
|  | Phf11d | 1.158 | 246.480 | 0.000 |
|  | Rhbdl3 | 1.179 | 82.244 | 0.003 |
|  | Klf10 | 1.192 | 3267.977 | 0.000 |
|  | Vash1 | 1.216 | 84.430 | 0.000 |
|  | Tincr | 1.232 | 24.738 | 0.030 |
|  | Cmpk2 | 1.254 | 189.448 | 0.000 |
|  | Cxcl10 | 1.274 | 253.358 | 0.000 |
|  | Gadd45b | 1.298 | 3103.625 | 0.001 |
|  | Irgm2 | 1.302 | 398.632 | 0.000 |
|  | Tgtp1 | 1.307 | 86.496 | 0.003 |
|  | Ifit3 | 1.320 | 150.911 | 0.002 |
|  | Gm12250 | 1.351 | 23.303 | 0.027 |
|  | Oasl1 | 1.356 | 932.853 | 0.000 |
|  | Gbp5 | 1.365 | 137.073 | 0.000 |
|  | Gbp7 | 1.370 | 602.801 | 0.000 |
|  | Col1a1 | 1.404 | 116.727 | 0.000 |
|  | Gbp3 | 1.406 | 485.016 | 0.000 |
|  | Rsad2 | 1.434 | 527.362 | 0.000 |
|  | Rgcc | 1.450 | 22.700 | 0.024 |
|  | Mybpc3 | 1.453 | 23.686 | 0.006 |
|  | Plekhs1 | 1.461 | 80.115 | 0.031 |
|  | Isg15 | 1.475 | 566.757 | 0.000 |
|  | Ifit1 | 1.561 | 405.524 | 0.000 |
|  | Apol10b | 1.598 | 43.104 | 0.000 |
|  | Krt17 | 1.908 | 59.913 | 0.000 |
|  | Krt16 | 2.111 | 68.999 | 0.000 |
|  | Angptl4 | 2.253 | 13.274 | 0.007 |
|  | Prl2c2 | 2.303 | 20.201 | 0.007 |
|  | Col3a1 | 2.391 | 16.523 | 0.009 |
|  | Prl2c3 | 2.684 | 58.947 | 0.000 |
|  | Col1a2 | 4.042 | 80.533 | 0.000 |