Supplementary Material

**Table S1:** Quantity of clean and mapped reads

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Treatment** | **Sample** | **Total clean reads** | **Total mapped reads** | **Mapped:Clean ratio (%)** |
| **Naive** | N-1 | 20865023 | 17789972 | 85.3 |
| N-2 | 21178344 | 17666145 | 83.4 |
| N-3 | 20301615 | 16918074 | 83.3 |
| N-4 | 25140255 | 20453802 | 81.4 |
| **LDR** | LDR-1 | 20278529 | 16113120 | 79.5 |
| LDR-2 | 19105544 | 15042464 | 78.7 |
| LDR-3 | 20531573 | 17539570 | 85.4 |
| LDR-4 | 21975330 | 18866072 | 85.9 |
| **LDR-SC2** | LDR-SC2-1 | 17939136 | 15152453 | 84.5 |
| LDR-SC2-2 | 20061997 | 16762074 | 83.6 |
| LDR-SC2-3 | 18981029 | 16003819 | 84.3 |
| LDR-SC2-4 | 19930023 | 17031347 | 85.5 |
| **SC2** | SC2-1 | 24425475 | 20550939 | 84.1 |
| SC2-2 | 27562650 | 22614053 | 82 |
| SC2-3 | 29309585 | 24902443 | 85 |

**Table S2:** 50 top regulated DEGs in the LDR (A), LDR-SC2 (B) and SC2 (C) treatment groups versus naïve mice.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **)A( Symbol** | **Pvalue** | **adjPvalue** | **logFC** | **FC** |
| **Lcn2** | 5.77E-144 | 1.09E-139 | 4.156241 | 17.83008 |
| **Ccl2** | 3.08E-132 | 2.91E-128 | 7.054101 | 132.8911 |
| **Retnla** | 5.59E-129 | 3.53E-125 | 6.841872 | 114.712 |
| **Saa3** | 2.40E-120 | 1.14E-116 | 9.021151 | 519.5616 |
| **Ccl7** | 3.79E-120 | 1.44E-116 | 8.451556 | 350.0837 |
| **Thbs4** | 1.89E-119 | 5.97E-116 | 8.301711 | 315.547 |
| **Timp1** | 4.75E-104 | 1.28E-100 | 6.818933 | 112.9025 |
| **Il1rn** | 6.06E-104 | 1.43E-100 | 3.632418 | 12.40129 |
| **Cxcl1** | 1.24E-99 | 2.61E-96 | 5.204185 | 36.86512 |
| **Cdk1** | 1.47E-94 | 2.79E-91 | 4.268089 | 19.26739 |
| **C3ar1** | 6.46E-81 | 1.11E-77 | 3.474807 | 11.11786 |
| **Prc1** | 9.83E-78 | 1.55E-74 | 3.969609 | 15.66648 |
| **Tgm1** | 7.69E-77 | 1.12E-73 | 3.499133 | 11.30691 |
| **Psrc1** | 7.76E-72 | 1.05E-68 | 5.303083 | 39.48091 |
| **Serpina3n** | 2.46E-70 | 3.11E-67 | 3.583664 | 11.98921 |
| **Birc5** | 6.73E-70 | 7.96E-67 | 4.218408 | 18.61519 |
| **Ccl12** | 7.04E-68 | 7.84E-65 | 5.531381 | 46.24998 |
| **Ccnb2** | 4.95E-67 | 5.20E-64 | 3.546579 | 11.68494 |
| **Fgfr3** | 6.38E-67 | 6.36E-64 | -2.29965 | 0.203112 |
| **Nfkbie** | 5.50E-65 | 5.20E-62 | 2.823423 | 7.0784 |
| **Lama3** | 2.07E-62 | 1.87E-59 | -2.40491 | 0.188821 |
| **Tacc3** | 2.14E-60 | 1.84E-57 | 3.196701 | 9.168598 |
| **Cdc20** | 9.29E-59 | 7.65E-56 | 3.451558 | 10.94013 |
| **Marcksl1** | 2.21E-57 | 1.74E-54 | 2.957189 | 7.766092 |
| **Ckap2** | 4.32E-57 | 3.27E-54 | 3.949496 | 15.44958 |
| **Ccl3** | 2.04E-56 | 1.48E-53 | 3.783581 | 13.77119 |
| **Ifi204** | 1.78E-55 | 1.25E-52 | 3.572297 | 11.89512 |
| **Knstrn** | 2.89E-55 | 1.95E-52 | 3.203457 | 9.211632 |
| **Rrm2** | 1.28E-54 | 8.35E-52 | 2.973988 | 7.85705 |
| **Clec12a** | 4.78E-54 | 3.01E-51 | 2.406068 | 5.300279 |
| **Cks1b** | 5.43E-53 | 3.32E-50 | 2.794101 | 6.935986 |
| **Mcm5** | 1.85E-52 | 1.09E-49 | 2.203723 | 4.606665 |
| **Plk1** | 7.80E-52 | 4.48E-49 | 3.339011 | 10.11911 |
| **Cnbd2** | 1.08E-51 | 6.00E-49 | 2.758495 | 6.766899 |
| **Cdca3** | 2.02E-50 | 1.09E-47 | 3.694396 | 12.94565 |
| **Cd14** | 5.30E-50 | 2.79E-47 | 2.46147 | 5.507775 |
| **Psat1** | 6.84E-50 | 3.50E-47 | 2.159574 | 4.467829 |
| **Tk1** | 8.55E-50 | 4.26E-47 | 3.531661 | 11.56474 |
| **Pbk** | 3.71E-49 | 1.76E-46 | 4.373744 | 20.73137 |
| **Rgs16** | 3.68E-49 | 1.76E-46 | 3.854246 | 14.46251 |
| **Mcm3** | 6.65E-49 | 3.07E-46 | 2.35151 | 5.103583 |
| **S100a4** | 8.11E-49 | 3.66E-46 | 2.70225 | 6.508163 |
| **Cfb** | 1.73E-48 | 7.64E-46 | 4.417422 | 21.36862 |
| **Tnip3** | 2.66E-48 | 1.15E-45 | 4.517992 | 22.91138 |
| **Nuf2** | 9.91E-48 | 4.08E-45 | 3.715376 | 13.13529 |
| **Npr3** | 9.84E-48 | 4.08E-45 | -3.75079 | 0.074285 |
| **Il4i1** | 1.48E-47 | 5.95E-45 | 3.298543 | 9.839213 |
| **Relb** | 4.43E-47 | 1.75E-44 | 2.205456 | 4.612204 |
| **Fgr** | 1.94E-46 | 7.52E-44 | 2.119598 | 4.345729 |
| **Ccna2** | 2.08E-46 | 7.87E-44 | 3.393405 | 10.50792 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **)B( Symbol** | **Pvalue** | **adjPvalue** | **logFC** | **FC** |
| **Il18bp** | 0 | 0 | 5.281903 | 38.90552 |
| **Mx1** | 0 | 0 | 7.514694 | 182.8725 |
| **Mx2** | 0 | 0 | 6.98724 | 126.8729 |
| **Phf11d** | 0 | 0 | 5.40678 | 42.42315 |
| **Saa3** | 9.60E-308 | 3.78E-304 | 9.542853 | 745.9077 |
| **Xaf1** | 1.76E-303 | 5.79E-300 | 4.428117 | 21.52763 |
| **Iigp1** | 1.80E-302 | 5.06E-299 | 5.364569 | 41.19991 |
| **Ifi204** | 9.84E-302 | 2.42E-298 | 5.917369 | 60.43736 |
| **Cfb** | 3.29E-275 | 7.20E-272 | 6.094013 | 68.30944 |
| **Usp18** | 3.02E-254 | 5.95E-251 | 5.429344 | 43.09186 |
| **Serpina3n** | 2.50E-252 | 4.47E-249 | 4.194742 | 18.31231 |
| **Phf11b** | 6.68E-250 | 1.10E-246 | 5.976854 | 62.98142 |
| **Ifit1** | 2.30E-243 | 3.48E-240 | 6.061906 | 66.80599 |
| **Apol9a** | 5.45E-243 | 7.66E-240 | 8.3218 | 319.9717 |
| **Ddx58** | 1.89E-242 | 2.48E-239 | 3.013053 | 8.072712 |
| **Trim30a** | 3.72E-240 | 4.58E-237 | 3.850121 | 14.42121 |
| **Cmpk2** | 3.53E-234 | 4.09E-231 | 4.572481 | 23.79326 |
| **Oas1g** | 4.16E-223 | 4.55E-220 | 7.105683 | 137.7284 |
| **Oas3** | 2.18E-221 | 2.26E-218 | 7.238252 | 150.984 |
| **Dhx58** | 1.90E-217 | 1.87E-214 | 4.741879 | 26.75763 |
| **Gbp3** | 6.49E-215 | 6.08E-212 | 5.015599 | 32.34788 |
| **Apol9b** | 1.87E-214 | 1.68E-211 | 7.66291 | 202.6589 |
| **Zbp1** | 9.47E-213 | 8.10E-210 | 6.9794 | 126.1853 |
| **Oasl1** | 4.83E-207 | 3.96E-204 | 7.81013 | 224.4313 |
| **Isg15** | 9.90E-207 | 7.79E-204 | 7.557605 | 188.3934 |
| **Oasl2** | 1.14E-202 | 8.65E-200 | 5.018835 | 32.42051 |
| **Trex1** | 2.01E-201 | 1.46E-198 | 4.510432 | 22.79162 |
| **Ddx60** | 8.60E-200 | 6.04E-197 | 4.128063 | 17.48521 |
| **Irgm1** | 2.85E-197 | 1.93E-194 | 4.433932 | 21.61456 |
| **Gm4951** | 5.02E-196 | 3.29E-193 | 5.228242 | 37.485 |
| **Rnf213** | 1.39E-195 | 8.82E-193 | 3.695234 | 12.95318 |
| **Irf7** | 2.08E-191 | 1.28E-188 | 6.879012 | 117.7034 |
| **Plac8** | 1.12E-187 | 6.67E-185 | 4.936613 | 30.62448 |
| **Herc6** | 1.77E-187 | 1.02E-184 | 3.721473 | 13.19092 |
| **Retnla** | 8.67E-187 | 4.87E-184 | 5.457088 | 43.92859 |
| **Ifit2** | 1.33E-184 | 7.28E-182 | 5.751893 | 53.88802 |
| **Lcn2** | 3.56E-184 | 1.89E-181 | 5.023408 | 32.52344 |
| **Ifi44** | 6.03E-181 | 3.12E-178 | 6.044105 | 65.98678 |
| **Ccl7** | 4.68E-166 | 2.36E-163 | 10.13181 | 1121.967 |
| **Gm5431** | 4.15E-165 | 2.04E-162 | 5.051437 | 33.16148 |
| **Mlkl** | 1.65E-164 | 7.91E-162 | 4.093176 | 17.06745 |
| **Sp100** | 7.52E-164 | 3.52E-161 | 2.509393 | 5.693803 |
| **Tap1** | 8.19E-153 | 3.75E-150 | 3.811587 | 14.04113 |
| **Parp9** | 1.37E-152 | 6.14E-150 | 2.885504 | 7.389639 |
| **Stat2** | 2.96E-152 | 1.30E-149 | 2.794252 | 6.936711 |
| **Tgtp2** | 1.26E-151 | 5.40E-149 | 4.323231 | 20.01807 |
| **Oas1a** | 1.93E-149 | 8.10E-147 | 6.021403 | 64.95656 |
| **Gbp5** | 8.32E-149 | 3.41E-146 | 5.054297 | 33.2273 |
| **Gm12185** | 1.38E-148 | 5.55E-146 | 4.708438 | 26.14454 |
| **Cxcl13** | 2.60E-145 | 1.02E-142 | 6.502326 | 90.6557 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **)C( Symbol** | **Pvalue** | **adjPvalue** | **logFC** | **FC** |
| **Irf7** | 2.26E-113 | 3.71E-109 | 4.78391 | 27.54866 |
| **Ifit1** | 1.30E-105 | 1.07E-101 | 4.383311 | 20.86932 |
| **Mx1** | 2.04E-93 | 1.12E-89 | 5.162595 | 35.81755 |
| **Usp18** | 4.16E-92 | 1.71E-88 | 3.398236 | 10.54316 |
| **Ly6i** | 2.24E-89 | 7.37E-86 | 6.46452 | 88.31091 |
| **Apol9b** | 2.86E-88 | 7.82E-85 | 5.228759 | 37.49845 |
| **Cxcl10** | 1.18E-83 | 2.76E-80 | 6.001991 | 64.08841 |
| **Oasl2** | 3.43E-82 | 7.04E-79 | 3.744652 | 13.40456 |
| **Phf11d** | 1.74E-80 | 3.18E-77 | 3.078133 | 8.445207 |
| **Oas1g** | 4.03E-78 | 6.63E-75 | 4.800057 | 27.85873 |
| **Iigp1** | 1.45E-77 | 2.17E-74 | 3.364576 | 10.30003 |
| **Apol9a** | 1.38E-76 | 1.75E-73 | 5.379166 | 41.61887 |
| **Isg15** | 1.29E-76 | 1.75E-73 | 5.081616 | 33.86247 |
| **Oas3** | 2.14E-75 | 2.51E-72 | 5.008005 | 32.17806 |
| **Dhx58** | 2.10E-73 | 2.30E-70 | 3.009673 | 8.053821 |
| **Ifit2** | 1.55E-72 | 1.60E-69 | 3.696456 | 12.96415 |
| **Baiap2l1** | 3.10E-66 | 2.99E-63 | -2.89076 | 0.134832 |
| **Zbp1** | 8.75E-66 | 7.99E-63 | 4.559532 | 23.58066 |
| **Gm8730** | 7.30E-65 | 6.31E-62 | 6.73878 | 106.8009 |
| **Ifi44** | 8.53E-63 | 7.01E-60 | 4.272422 | 19.32534 |
| **Oasl1** | 5.13E-59 | 4.01E-56 | 5.017566 | 32.39201 |
| **Cfb** | 4.46E-58 | 3.33E-55 | 3.858711 | 14.50734 |
| **Irgm1** | 6.56E-58 | 4.68E-55 | 2.550682 | 5.859112 |
| **Xaf1** | 1.25E-57 | 8.56E-55 | 2.59161 | 6.027711 |
| **Stat1** | 2.13E-56 | 1.40E-53 | 2.28869 | 4.886121 |
| **Gbp3** | 4.76E-56 | 3.01E-53 | 2.914954 | 7.542033 |
| **Trim30a** | 1.78E-55 | 1.09E-52 | 2.172248 | 4.507252 |
| **Cmpk2** | 3.96E-55 | 2.32E-52 | 2.536143 | 5.800362 |
| **Il18bp** | 1.07E-54 | 6.06E-52 | 2.489646 | 5.6164 |
| **Oas1a** | 2.75E-53 | 1.51E-50 | 4.115005 | 17.32766 |
| **Ccl7** | 7.39E-52 | 3.92E-49 | 5.396541 | 42.12313 |
| **Ifi204** | 1.73E-51 | 8.88E-49 | 3.142992 | 8.833545 |
| **Phf11b** | 1.99E-51 | 9.92E-49 | 3.2297 | 9.380727 |
| **Eif2ak2** | 4.32E-51 | 2.09E-48 | 2.04223 | 4.118817 |
| **Slfn9** | 1.20E-47 | 5.62E-45 | 2.89275 | 7.426849 |
| **Ifi202b** | 2.15E-47 | 9.80E-45 | 3.795154 | 13.8821 |
| **Gbp5** | 1.04E-45 | 4.62E-43 | 2.699394 | 6.495291 |
| **Ddx60** | 7.76E-41 | 3.36E-38 | 2.38491 | 5.223114 |
| **Mx2** | 8.28E-41 | 3.49E-38 | 4.21496 | 18.57074 |
| **Gm5431** | 1.17E-40 | 4.81E-38 | 3.545054 | 11.6726 |
| **Sp100** | 1.20E-40 | 4.83E-38 | 1.54696 | 2.922007 |
| **Saa3** | 2.63E-39 | 1.03E-36 | 4.934557 | 30.58086 |
| **Ifi47** | 4.55E-39 | 1.74E-36 | 2.126927 | 4.367861 |
| **Trex1** | 4.05E-38 | 1.51E-35 | 2.146493 | 4.427503 |
| **Rtp4** | 4.66E-38 | 1.70E-35 | 2.871692 | 7.319233 |
| **Bst2** | 4.14E-37 | 1.48E-34 | 2.663047 | 6.333693 |
| **Gm4951** | 5.44E-37 | 1.90E-34 | 3.042237 | 8.237673 |
| **Gm12250** | 1.24E-36 | 4.24E-34 | 3.367496 | 10.32089 |
| **Parp9** | 2.37E-36 | 7.94E-34 | 1.529323 | 2.886504 |
| **Herc6** | 3.77E-36 | 1.24E-33 | 2.007197 | 4.020004 |

Differentially Expressed Genes were defined having p-adjusted of ≤ 0.01 and a fold change of ≥ 1.5 or ≤ 0.66. adjPvalue – adjusted P value, logFC – the log2 of fold change, FC- fold change.