

Toal 501 Up-regulated gene in Fst-/- ; 176 down-regulated gene in Fst-/-

Toal 501 Up-reguated gene in Fst-/- (P<=0.05 1.5 Folds change)

| Gene ID | Total counts | P-value (mut) | FDR step up | Ratio (mutant) | Fold change (LSMean(mutant)) | |
|---------|--------------|---------------|-------------|----------------|------------------------------|----------|
| Myh7 | 4.11E+02 | 9.32E-07 | 9.07E-03 | 2.84E+01 | 2.84E+01 | 1.32E+02 |
| Myh6 | 9.22E+01 | 1.16E-06 | 9.07E-03 | 2.23E+01 | 2.23E+01 | 2.94E+01 |
| Myl3 | 5.56E+01 | 5.11E-06 | 1.58E-02 | 2.10E+01 | 2.10E+01 | 1.77E+01 |
| Eya2 | 3.24E+01 | 1.40E-05 | 2.19E-02 | 6.49E+00 | 6.49E+00 | 9.37E+00 |
| Myh7b | 3.05E+01 | 4.14E-05 | 4.36E-02 | 6.47E+00 | 6.47E+00 | 8.81E+00 |
| Tpsab1 | 8.84E+00 | 3.12E-04 | 1.36E-01 | 5.41E+00 | 5.41E+00 | 2.49E+00 |
| Xist | 2.63E+03 | 1.26E-02 | 2.91E-01 | 5.19E+00 | 5.19E+00 | 7.35E+02 |
| Pthlh | 1.74E+01 | 6.18E-05 | 5.37E-02 | 5.09E+00 | 5.09E+00 | 4.84E+00 |
| Mb | 5.51E+01 | 1.18E-04 | 7.39E-02 | 4.63E+00 | 4.63E+00 | 1.51E+01 |
| Wfdc18 | 2.43E+01 | 1.64E-02 | 2.97E-01 | 4.06E+00 | 4.06E+00 | 6.50E+00 |
| Tnnc1 | 1.99E+02 | 1.34E-05 | 2.19E-02 | 3.86E+00 | 3.86E+00 | 5.27E+01 |
| Dmrta2 | 1.86E+01 | 8.78E-05 | 5.73E-02 | 3.86E+00 | 3.86E+00 | 4.93E+00 |
| Sprr2a2 | 2.32E+01 | 4.93E-04 | 1.43E-01 | 3.73E+00 | 3.73E+00 | 6.09E+00 |
| Pyhin1 | 1.17E+01 | 2.99E-02 | 3.10E-01 | 3.50E+00 | 3.50E+00 | 3.04E+00 |
| Mid1 | 1.28E+02 | 3.23E-04 | 1.37E-01 | 3.45E+00 | 3.45E+00 | 3.31E+01 |
| Gm21857 | 9.22E+00 | 6.49E-03 | 2.79E-01 | 3.35E+00 | 3.35E+00 | 2.37E+00 |
| Myl6b | 1.63E+02 | 8.29E-05 | 5.64E-02 | 3.32E+00 | 3.32E+00 | 4.17E+01 |
| Ifi204 | 1.85E+01 | 1.59E-02 | 2.97E-01 | 3.25E+00 | 3.25E+00 | 4.72E+00 |
| Ppbp | 1.92E+01 | 3.76E-03 | 2.45E-01 | 3.18E+00 | 3.18E+00 | 4.86E+00 |
| Ifi202b | 4.00E+01 | 5.80E-05 | 5.37E-02 | 3.17E+00 | 3.17E+00 | 1.01E+01 |
| Cma1 | 2.57E+01 | 2.71E-05 | 3.86E-02 | 3.13E+00 | 3.13E+00 | 6.48E+00 |
| Cyp4b1 | 1.61E+01 | 2.65E-03 | 2.33E-01 | 3.12E+00 | 3.12E+00 | 4.06E+00 |
| Tfcp2l1 | 1.23E+02 | 6.28E-03 | 2.79E-01 | 3.09E+00 | 3.09E+00 | 3.09E+01 |
| Gm9573 | 7.29E+01 | 1.36E-02 | 2.93E-01 | 2.99E+00 | 2.99E+00 | 1.82E+01 |
| Mcpt4 | 1.21E+01 | 4.37E-04 | 1.40E-01 | 2.87E+00 | 2.87E+00 | 2.98E+00 |
| Pi15 | 1.61E+01 | 5.04E-04 | 1.43E-01 | 2.84E+00 | 2.84E+00 | 3.97E+00 |
| Tpsb2 | 3.78E+01 | 3.61E-05 | 4.36E-02 | 2.80E+00 | 2.80E+00 | 9.29E+00 |
| Sprr2a1 | 1.96E+01 | 1.46E-02 | 2.93E-01 | 2.80E+00 | 2.80E+00 | 4.80E+00 |
| Hmgcs2 | 7.75E+00 | 2.85E-04 | 1.35E-01 | 2.76E+00 | 2.76E+00 | 1.90E+00 |
| Cpxm2 | 4.97E+01 | 7.67E-03 | 2.79E-01 | 2.75E+00 | 2.75E+00 | 1.22E+01 |
| Gm21887 | 3.04E+01 | 1.90E-02 | 3.01E-01 | 2.74E+00 | 2.74E+00 | 7.42E+00 |
| Lpar3 | 2.44E+01 | 1.15E-03 | 1.93E-01 | 2.68E+00 | 2.68E+00 | 5.93E+00 |
| Pbp2 | 4.02E+01 | 2.66E-02 | 3.04E-01 | 2.62E+00 | 2.62E+00 | 9.69E+00 |
| Lgr5 | 8.32E+01 | 1.45E-03 | 2.01E-01 | 2.58E+00 | 2.58E+00 | 2.00E+01 |
| Cpa3 | 2.62E+01 | 7.75E-04 | 1.61E-01 | 2.57E+00 | 2.57E+00 | 6.28E+00 |
| Ltf | 9.85E+01 | 1.80E-02 | 2.99E-01 | 2.54E+00 | 2.54E+00 | 2.35E+01 |
| Plb1 | 7.37E+01 | 8.43E-04 | 1.61E-01 | 2.53E+00 | 2.53E+00 | 1.76E+01 |
| Aldh3a1 | 1.53E+01 | 6.18E-03 | 2.79E-01 | 2.52E+00 | 2.52E+00 | 3.66E+00 |

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|-------------|----------|----------|----------|----------|----------|----------|
| Dynap | 2.66E+01 | 7.34E-03 | 2.79E-01 | 2.51E+00 | 2.51E+00 | 6.34E+00 |
| Krt7 | 2.35E+02 | 4.29E-03 | 2.61E-01 | 2.49E+00 | 2.49E+00 | 5.58E+01 |
| Hdc | 3.49E+01 | 7.35E-05 | 5.41E-02 | 2.47E+00 | 2.47E+00 | 8.28E+00 |
| Cpz | 1.42E+01 | 2.97E-04 | 1.35E-01 | 2.46E+00 | 2.46E+00 | 3.36E+00 |
| Krt8 | 5.40E+01 | 3.34E-03 | 2.35E-01 | 2.46E+00 | 2.46E+00 | 1.28E+01 |
| Fam26e | 2.31E+01 | 4.18E-05 | 4.36E-02 | 2.45E+00 | 2.45E+00 | 5.46E+00 |
| AV026068 | 1.70E+01 | 1.53E-02 | 2.95E-01 | 2.44E+00 | 2.44E+00 | 4.02E+00 |
| Psmc3ip | 1.62E+01 | 5.86E-04 | 1.52E-01 | 2.42E+00 | 2.42E+00 | 3.81E+00 |
| Il1rl1 | 7.58E+00 | 1.42E-03 | 2.01E-01 | 2.41E+00 | 2.41E+00 | 1.79E+00 |
| Tmprss11g | 8.35E+01 | 1.78E-03 | 2.10E-01 | 2.41E+00 | 2.41E+00 | 1.97E+01 |
| Cldn7 | 1.35E+01 | 2.39E-03 | 2.28E-01 | 2.40E+00 | 2.40E+00 | 3.18E+00 |
| Arg1 | 4.22E+02 | 1.74E-02 | 2.99E-01 | 2.37E+00 | 2.37E+00 | 9.90E+01 |
| Ccl21a | 2.00E+01 | 2.14E-02 | 3.01E-01 | 2.37E+00 | 2.37E+00 | 4.68E+00 |
| Hs3st1 | 2.25E+01 | 7.61E-05 | 5.41E-02 | 2.36E+00 | 2.36E+00 | 5.26E+00 |
| Col9a3 | 1.63E+01 | 5.30E-03 | 2.79E-01 | 2.34E+00 | 2.34E+00 | 3.82E+00 |
| Barx1 | 3.00E+01 | 4.27E-03 | 2.61E-01 | 2.34E+00 | 2.34E+00 | 7.00E+00 |
| RP23-396C19 | 8.12E+00 | 9.96E-03 | 2.86E-01 | 2.34E+00 | 2.34E+00 | 1.89E+00 |
| Phex | 1.10E+01 | 1.12E-02 | 2.90E-01 | 2.31E+00 | 2.31E+00 | 2.55E+00 |
| Shh | 1.76E+01 | 1.83E-03 | 2.10E-01 | 2.31E+00 | 2.31E+00 | 4.09E+00 |
| Anxa1 | 5.41E+02 | 4.54E-03 | 2.70E-01 | 2.29E+00 | 2.29E+00 | 1.25E+02 |
| Crabp2 | 1.25E+02 | 1.11E-02 | 2.90E-01 | 2.28E+00 | 2.28E+00 | 2.90E+01 |
| Gdf6 | 1.67E+01 | 1.50E-02 | 2.95E-01 | 2.27E+00 | 2.27E+00 | 3.87E+00 |
| Shox2 | 9.53E+00 | 4.68E-03 | 2.74E-01 | 2.27E+00 | 2.27E+00 | 2.20E+00 |
| Pirt | 1.30E+01 | 1.78E-03 | 2.10E-01 | 2.27E+00 | 2.27E+00 | 3.00E+00 |
| Il1a | 9.07E+00 | 1.29E-02 | 2.93E-01 | 2.26E+00 | 2.26E+00 | 2.10E+00 |
| Cd74 | 1.41E+01 | 1.57E-03 | 2.02E-01 | 2.26E+00 | 2.26E+00 | 3.27E+00 |
| Erdr1 | 8.35E+01 | 1.91E-02 | 3.01E-01 | 2.25E+00 | 2.25E+00 | 1.93E+01 |
| Stac | 1.94E+01 | 8.12E-04 | 1.61E-01 | 2.24E+00 | 2.24E+00 | 4.48E+00 |
| Smt3h1-ps | 1.76E+01 | 4.84E-02 | 3.19E-01 | 2.23E+00 | 2.23E+00 | 4.05E+00 |
| Mndal | 1.25E+01 | 8.55E-03 | 2.79E-01 | 2.23E+00 | 2.23E+00 | 2.87E+00 |
| Cwh43 | 1.98E+01 | 3.19E-02 | 3.11E-01 | 2.23E+00 | 2.23E+00 | 4.55E+00 |
| Syndig1 | 2.30E+01 | 1.04E-03 | 1.87E-01 | 2.22E+00 | 2.22E+00 | 5.28E+00 |
| Illdr1 | 3.73E+01 | 4.52E-03 | 2.70E-01 | 2.21E+00 | 2.21E+00 | 8.57E+00 |
| Nefm | 9.36E+00 | 2.78E-02 | 3.05E-01 | 2.21E+00 | 2.21E+00 | 2.15E+00 |
| Krt18 | 5.88E+01 | 3.28E-03 | 2.35E-01 | 2.20E+00 | 2.20E+00 | 1.35E+01 |
| Apol7a | 1.72E+01 | 1.92E-02 | 3.01E-01 | 2.19E+00 | 2.19E+00 | 3.93E+00 |
| St6galnac2 | 4.78E+01 | 4.49E-04 | 1.41E-01 | 2.19E+00 | 2.19E+00 | 1.09E+01 |
| Pisd-ps2 | 1.07E+01 | 2.92E-02 | 3.10E-01 | 2.19E+00 | 2.19E+00 | 2.44E+00 |
| Tmem8 | 1.95E+01 | 2.29E-02 | 3.01E-01 | 2.17E+00 | 2.17E+00 | 4.44E+00 |
| Gm8797 | 3.05E+02 | 3.76E-02 | 3.16E-01 | 2.16E+00 | 2.16E+00 | 6.95E+01 |
| Adamts19 | 9.77E+00 | 2.60E-03 | 2.33E-01 | 2.16E+00 | 2.16E+00 | 2.23E+00 |
| Rbp1 | 5.50E+01 | 2.45E-04 | 1.24E-01 | 2.15E+00 | 2.15E+00 | 1.25E+01 |
| Cfap45 | 8.29E+00 | 2.43E-02 | 3.02E-01 | 2.15E+00 | 2.15E+00 | 1.89E+00 |

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| Krt19 | 1.52E+02 | 2.01E-02 | 3.01E-01 | 2.15E+00 | 2.15E+00 | 3.46E+01 |
| Ccdc68 | 1.68E+01 | 2.70E-02 | 3.04E-01 | 2.14E+00 | 2.14E+00 | 3.81E+00 |
| Slc5a7 | 7.18E+00 | 1.01E-03 | 1.87E-01 | 2.14E+00 | 2.14E+00 | 1.63E+00 |
| Crabp1 | 3.57E+01 | 6.12E-03 | 2.79E-01 | 2.14E+00 | 2.14E+00 | 8.10E+00 |
| H2-Aa | 6.96E+00 | 8.67E-03 | 2.79E-01 | 2.14E+00 | 2.14E+00 | 1.58E+00 |
| Fanca | 1.03E+01 | 5.50E-03 | 2.79E-01 | 2.13E+00 | 2.13E+00 | 2.34E+00 |
| Hbb-bt | 3.95E+02 | 4.65E-02 | 3.17E-01 | 2.12E+00 | 2.12E+00 | 8.96E+01 |
| Prkcb | 6.57E+00 | 1.73E-03 | 2.10E-01 | 2.12E+00 | 2.12E+00 | 1.49E+00 |
| Adamts16 | 6.86E+00 | 1.19E-02 | 2.91E-01 | 2.12E+00 | 2.12E+00 | 1.55E+00 |
| Gm17167 | 7.50E+00 | 3.53E-02 | 3.11E-01 | 2.11E+00 | 2.11E+00 | 1.70E+00 |
| Plac8 | 2.60E+01 | 2.48E-02 | 3.02E-01 | 2.11E+00 | 2.11E+00 | 5.89E+00 |
| Mapk15 | 1.30E+01 | 8.25E-03 | 2.79E-01 | 2.10E+00 | 2.10E+00 | 2.94E+00 |
| Brinp1 | 2.21E+01 | 7.11E-04 | 1.60E-01 | 2.10E+00 | 2.10E+00 | 4.99E+00 |
| Fst | 3.09E+02 | 4.31E-06 | 1.58E-02 | 2.10E+00 | 2.10E+00 | 6.97E+01 |
| Icosl | 2.34E+01 | 6.89E-04 | 1.60E-01 | 2.10E+00 | 2.10E+00 | 5.28E+00 |
| Medag | 5.33E+01 | 6.05E-05 | 5.37E-02 | 2.09E+00 | 2.09E+00 | 1.20E+01 |
| Clec11a | 1.51E+01 | 7.52E-03 | 2.79E-01 | 2.08E+00 | 2.08E+00 | 3.40E+00 |
| Rnf182 | 1.02E+01 | 1.39E-03 | 2.01E-01 | 2.07E+00 | 2.07E+00 | 2.30E+00 |
| Qpct | 3.12E+01 | 2.61E-03 | 2.33E-01 | 2.07E+00 | 2.07E+00 | 7.00E+00 |
| A730017C20f | 7.51E+00 | 1.28E-02 | 2.92E-01 | 2.06E+00 | 2.06E+00 | 1.69E+00 |
| Sbspon | 1.60E+01 | 1.29E-03 | 2.01E-01 | 2.05E+00 | 2.05E+00 | 3.60E+00 |
| Atrip | 1.03E+01 | 8.33E-03 | 2.79E-01 | 2.03E+00 | 2.03E+00 | 2.30E+00 |
| Tnnt1 | 3.14E+02 | 1.56E-03 | 2.02E-01 | 2.03E+00 | 2.03E+00 | 7.02E+01 |
| Dlx1 | 2.50E+01 | 2.83E-03 | 2.33E-01 | 2.02E+00 | 2.02E+00 | 5.58E+00 |
| Epcam | 1.93E+02 | 2.48E-03 | 2.29E-01 | 2.02E+00 | 2.02E+00 | 4.31E+01 |
| Mss51 | 1.52E+01 | 6.46E-03 | 2.79E-01 | 2.02E+00 | 2.02E+00 | 3.39E+00 |
| Osr2 | 7.30E+01 | 1.98E-03 | 2.10E-01 | 2.01E+00 | 2.01E+00 | 1.63E+01 |
| Adgrg2 | 3.03E+01 | 1.84E-03 | 2.10E-01 | 2.00E+00 | 2.00E+00 | 6.72E+00 |
| Fosb | 6.67E+02 | 4.92E-02 | 3.20E-01 | 2.00E+00 | 2.00E+00 | 1.48E+02 |
| Ikzf1 | 9.91E+00 | 1.10E-03 | 1.90E-01 | 1.99E+00 | 1.99E+00 | 2.20E+00 |
| Dact2 | 7.82E+01 | 4.89E-04 | 1.43E-01 | 1.99E+00 | 1.99E+00 | 1.74E+01 |
| Spock3 | 6.19E+01 | 1.40E-03 | 2.01E-01 | 1.99E+00 | 1.99E+00 | 1.37E+01 |
| Mapt | 3.82E+01 | 2.11E-04 | 1.14E-01 | 1.99E+00 | 1.99E+00 | 8.47E+00 |
| Fabp7 | 7.42E+00 | 1.09E-02 | 2.90E-01 | 1.98E+00 | 1.98E+00 | 1.64E+00 |
| Cdhr1 | 4.03E+01 | 4.32E-04 | 1.40E-01 | 1.98E+00 | 1.98E+00 | 8.93E+00 |
| Fcgr2b | 7.75E+00 | 3.59E-03 | 2.44E-01 | 1.98E+00 | 1.98E+00 | 1.72E+00 |
| Lhx8 | 3.07E+01 | 1.56E-03 | 2.02E-01 | 1.98E+00 | 1.98E+00 | 6.79E+00 |
| Gm34379 | 1.21E+01 | 3.48E-02 | 3.11E-01 | 1.98E+00 | 1.98E+00 | 2.68E+00 |
| Duox2 | 7.67E+00 | 2.74E-03 | 2.33E-01 | 1.96E+00 | 1.96E+00 | 1.69E+00 |
| Ephb1 | 1.68E+01 | 1.24E-03 | 2.01E-01 | 1.95E+00 | 1.95E+00 | 3.69E+00 |
| Prr18 | 6.57E+00 | 6.80E-03 | 2.79E-01 | 1.95E+00 | 1.95E+00 | 1.45E+00 |
| Cacna1e | 4.85E+01 | 7.11E-04 | 1.60E-01 | 1.95E+00 | 1.95E+00 | 1.07E+01 |
| Ifi44 | 7.32E+00 | 3.81E-02 | 3.17E-01 | 1.95E+00 | 1.95E+00 | 1.61E+00 |

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| Slc7a11 | 2.41E+01 | 2.17E-02 | 3.01E-01 | 1.95E+00 | 1.95E+00 | 5.30E+00 |
| Casp12 | 1.23E+01 | 6.97E-03 | 2.79E-01 | 1.94E+00 | 1.94E+00 | 2.71E+00 |
| Nat8l | 4.74E+01 | 1.30E-03 | 2.01E-01 | 1.94E+00 | 1.94E+00 | 1.04E+01 |
| Gfra3 | 1.15E+01 | 2.36E-03 | 2.28E-01 | 1.93E+00 | 1.93E+00 | 2.53E+00 |
| Gpm6b | 2.18E+02 | 1.17E-05 | 2.19E-02 | 1.93E+00 | 1.93E+00 | 4.79E+01 |
| Epha3 | 2.20E+02 | 4.36E-04 | 1.40E-01 | 1.93E+00 | 1.93E+00 | 4.82E+01 |
| Pla2g7 | 1.31E+01 | 3.98E-02 | 3.17E-01 | 1.93E+00 | 1.93E+00 | 2.88E+00 |
| Vit | 1.34E+01 | 8.50E-03 | 2.79E-01 | 1.91E+00 | 1.91E+00 | 2.93E+00 |
| Gm13232 | 2.60E+01 | 4.31E-02 | 3.17E-01 | 1.91E+00 | 1.91E+00 | 5.68E+00 |
| Anxa3 | 4.34E+01 | 7.79E-03 | 2.79E-01 | 1.91E+00 | 1.91E+00 | 9.50E+00 |
| Nell1 | 4.65E+01 | 1.26E-02 | 2.91E-01 | 1.91E+00 | 1.91E+00 | 1.02E+01 |
| Coch | 1.08E+01 | 2.79E-02 | 3.05E-01 | 1.90E+00 | 1.90E+00 | 2.35E+00 |
| Gm12004 | 8.96E+00 | 4.32E-02 | 3.17E-01 | 1.90E+00 | 1.90E+00 | 1.96E+00 |
| Avpr1a | 1.74E+01 | 6.47E-03 | 2.79E-01 | 1.89E+00 | 1.89E+00 | 3.79E+00 |
| Gm12940 | 5.77E+01 | 3.26E-02 | 3.11E-01 | 1.88E+00 | 1.88E+00 | 1.26E+01 |
| Ankrd6 | 4.32E+01 | 2.13E-03 | 2.15E-01 | 1.88E+00 | 1.88E+00 | 9.40E+00 |
| Bnc1 | 4.39E+01 | 7.49E-03 | 2.79E-01 | 1.88E+00 | 1.88E+00 | 9.56E+00 |
| Lrmp | 2.09E+01 | 3.29E-02 | 3.11E-01 | 1.87E+00 | 1.87E+00 | 4.55E+00 |
| Hba-a1 | 9.79E+02 | 1.13E-02 | 2.90E-01 | 1.87E+00 | 1.87E+00 | 2.13E+02 |
| Slc22a4 | 8.24E+00 | 2.66E-02 | 3.04E-01 | 1.87E+00 | 1.87E+00 | 1.79E+00 |
| Upk3bl | 7.59E+01 | 3.24E-03 | 2.35E-01 | 1.86E+00 | 1.86E+00 | 1.64E+01 |
| Stmnd1 | 9.25E+00 | 3.21E-03 | 2.35E-01 | 1.86E+00 | 1.86E+00 | 2.00E+00 |
| Crispld2 | 6.43E+01 | 4.09E-04 | 1.40E-01 | 1.85E+00 | 1.85E+00 | 1.39E+01 |
| Pisd-ps1 | 5.39E+01 | 3.55E-02 | 3.11E-01 | 1.85E+00 | 1.85E+00 | 1.17E+01 |
| Acd | 3.69E+01 | 7.28E-03 | 2.79E-01 | 1.85E+00 | 1.85E+00 | 8.00E+00 |
| Gal3st3 | 1.20E+01 | 4.79E-03 | 2.75E-01 | 1.85E+00 | 1.85E+00 | 2.60E+00 |
| Islr2 | 3.32E+01 | 5.45E-04 | 1.52E-01 | 1.85E+00 | 1.85E+00 | 7.19E+00 |
| Prrt2 | 1.89E+01 | 3.92E-02 | 3.17E-01 | 1.85E+00 | 1.85E+00 | 4.08E+00 |
| Smpdl3b | 6.97E+00 | 5.75E-03 | 2.79E-01 | 1.84E+00 | 1.84E+00 | 1.51E+00 |
| Nuak2 | 6.63E+01 | 4.18E-03 | 2.58E-01 | 1.84E+00 | 1.84E+00 | 1.43E+01 |
| Gm16897 | 1.27E+01 | 2.05E-02 | 3.01E-01 | 1.84E+00 | 1.84E+00 | 2.74E+00 |
| Itgb8 | 7.69E+01 | 1.10E-03 | 1.90E-01 | 1.84E+00 | 1.84E+00 | 1.66E+01 |
| Gli1 | 1.44E+02 | 4.00E-04 | 1.40E-01 | 1.84E+00 | 1.84E+00 | 3.12E+01 |
| Sox2 | 2.74E+02 | 2.84E-03 | 2.33E-01 | 1.83E+00 | 1.83E+00 | 5.92E+01 |
| Plscr1 | 6.87E+00 | 2.42E-02 | 3.02E-01 | 1.83E+00 | 1.83E+00 | 1.48E+00 |
| Fbln1 | 2.60E+02 | 1.10E-03 | 1.90E-01 | 1.83E+00 | 1.83E+00 | 5.60E+01 |
| Hapln1 | 8.38E+00 | 9.98E-03 | 2.86E-01 | 1.82E+00 | 1.82E+00 | 1.80E+00 |
| Al606473 | 1.47E+01 | 6.95E-03 | 2.79E-01 | 1.82E+00 | 1.82E+00 | 3.17E+00 |
| Sfrp4 | 1.52E+01 | 2.30E-02 | 3.01E-01 | 1.82E+00 | 1.82E+00 | 3.26E+00 |
| Cyp3a13 | 1.58E+01 | 4.86E-02 | 3.19E-01 | 1.82E+00 | 1.82E+00 | 3.39E+00 |
| Emb | 7.26E+01 | 5.77E-03 | 2.79E-01 | 1.82E+00 | 1.82E+00 | 1.56E+01 |
| Gm10182 | 2.02E+02 | 1.35E-04 | 7.81E-02 | 1.81E+00 | 1.81E+00 | 4.34E+01 |
| Prss22 | 2.11E+01 | 2.63E-02 | 3.03E-01 | 1.81E+00 | 1.81E+00 | 4.52E+00 |

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| Naaa | 2.46E+01 | 3.06E-03 | 2.35E-01 | 1.81E+00 | 1.81E+00 | 5.28E+00 |
| Dscc1 | 9.47E+00 | 2.06E-02 | 3.01E-01 | 1.81E+00 | 1.81E+00 | 2.03E+00 |
| Xlr3a | 1.29E+01 | 4.63E-02 | 3.17E-01 | 1.81E+00 | 1.81E+00 | 2.77E+00 |
| Kcnt2 | 2.19E+01 | 3.81E-03 | 2.45E-01 | 1.81E+00 | 1.81E+00 | 4.69E+00 |
| Tmprss11b | 1.96E+02 | 2.59E-02 | 3.02E-01 | 1.81E+00 | 1.81E+00 | 4.19E+01 |
| Gria2 | 7.22E+00 | 2.61E-02 | 3.03E-01 | 1.80E+00 | 1.80E+00 | 1.55E+00 |
| Rac2 | 9.96E+00 | 1.42E-02 | 2.93E-01 | 1.80E+00 | 1.80E+00 | 2.13E+00 |
| Grem1 | 8.03E+01 | 7.12E-03 | 2.79E-01 | 1.80E+00 | 1.80E+00 | 1.72E+01 |
| Clca3a1 | 6.62E+00 | 2.81E-02 | 3.05E-01 | 1.80E+00 | 1.80E+00 | 1.42E+00 |
| Rasa4 | 2.13E+01 | 2.83E-03 | 2.33E-01 | 1.80E+00 | 1.80E+00 | 4.57E+00 |
| Slc35d3 | 7.97E+00 | 3.89E-02 | 3.17E-01 | 1.80E+00 | 1.80E+00 | 1.71E+00 |
| Cdc45 | 1.50E+01 | 3.88E-02 | 3.17E-01 | 1.79E+00 | 1.79E+00 | 3.20E+00 |
| Mpped2 | 2.07E+01 | 1.79E-03 | 2.10E-01 | 1.79E+00 | 1.79E+00 | 4.43E+00 |
| Tac1 | 7.60E+00 | 4.21E-02 | 3.17E-01 | 1.79E+00 | 1.79E+00 | 1.63E+00 |
| Tfap2b | 9.76E+01 | 4.31E-03 | 2.61E-01 | 1.79E+00 | 1.79E+00 | 2.09E+01 |
| Ctxn3 | 1.47E+01 | 7.37E-03 | 2.79E-01 | 1.79E+00 | 1.79E+00 | 3.15E+00 |
| Pzca | 3.44E+02 | 4.92E-02 | 3.20E-01 | 1.79E+00 | 1.79E+00 | 7.36E+01 |
| Adam8 | 1.31E+01 | 6.77E-03 | 2.79E-01 | 1.78E+00 | 1.78E+00 | 2.81E+00 |
| Lyz2 | 5.50E+01 | 3.82E-02 | 3.17E-01 | 1.78E+00 | 1.78E+00 | 1.17E+01 |
| Rgs14 | 9.12E+00 | 2.38E-02 | 3.02E-01 | 1.78E+00 | 1.78E+00 | 1.95E+00 |
| Ccr2 | 1.33E+01 | 2.94E-02 | 3.10E-01 | 1.78E+00 | 1.78E+00 | 2.84E+00 |
| Timp1 | 9.49E+00 | 8.34E-03 | 2.79E-01 | 1.78E+00 | 1.78E+00 | 2.03E+00 |
| Ctss | 1.61E+01 | 3.42E-02 | 3.11E-01 | 1.78E+00 | 1.78E+00 | 3.43E+00 |
| Col9a1 | 6.99E+00 | 1.37E-02 | 2.93E-01 | 1.78E+00 | 1.78E+00 | 1.49E+00 |
| Gm12473 | 9.14E+00 | 2.12E-02 | 3.01E-01 | 1.77E+00 | 1.77E+00 | 1.95E+00 |
| Mettl21c | 1.30E+01 | 1.76E-02 | 2.99E-01 | 1.77E+00 | 1.77E+00 | 2.76E+00 |
| Crip1 | 9.64E+01 | 1.74E-02 | 2.99E-01 | 1.77E+00 | 1.77E+00 | 2.05E+01 |
| Olfm12a | 1.54E+02 | 4.19E-04 | 1.40E-01 | 1.76E+00 | 1.76E+00 | 3.28E+01 |
| Kcnk1 | 5.04E+01 | 3.81E-03 | 2.45E-01 | 1.76E+00 | 1.76E+00 | 1.07E+01 |
| Tmem132e | 8.29E+00 | 2.10E-02 | 3.01E-01 | 1.76E+00 | 1.76E+00 | 1.76E+00 |
| Luzp2 | 2.07E+01 | 2.69E-03 | 2.33E-01 | 1.76E+00 | 1.76E+00 | 4.40E+00 |
| Prss12 | 3.71E+01 | 1.70E-02 | 2.98E-01 | 1.75E+00 | 1.75E+00 | 7.87E+00 |
| Dkk2 | 1.63E+02 | 7.01E-03 | 2.79E-01 | 1.75E+00 | 1.75E+00 | 3.45E+01 |
| BC055324 | 1.44E+01 | 1.79E-02 | 2.99E-01 | 1.75E+00 | 1.75E+00 | 3.06E+00 |
| Lppr4 | 2.05E+01 | 4.39E-03 | 2.64E-01 | 1.75E+00 | 1.75E+00 | 4.35E+00 |
| Gm38317 | 4.32E+01 | 1.09E-02 | 2.90E-01 | 1.75E+00 | 1.75E+00 | 9.17E+00 |
| Txn1 | 1.67E+02 | 3.33E-02 | 3.11E-01 | 1.75E+00 | 1.75E+00 | 3.54E+01 |
| Kcnv1 | 1.94E+01 | 3.45E-02 | 3.11E-01 | 1.75E+00 | 1.75E+00 | 4.11E+00 |
| Plxdc1 | 2.25E+01 | 9.34E-03 | 2.82E-01 | 1.75E+00 | 1.75E+00 | 4.77E+00 |
| Kera | 1.16E+02 | 5.05E-03 | 2.79E-01 | 1.74E+00 | 1.74E+00 | 2.47E+01 |
| Asb5 | 3.85E+01 | 2.67E-02 | 3.04E-01 | 1.74E+00 | 1.74E+00 | 8.16E+00 |
| Ppp4r4 | 7.85E+00 | 3.50E-02 | 3.11E-01 | 1.74E+00 | 1.74E+00 | 1.66E+00 |
| Tmem100 | 6.40E+01 | 3.01E-04 | 1.35E-01 | 1.74E+00 | 1.74E+00 | 1.36E+01 |

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| Gm12854 | 3.06E+02 | 1.66E-02 | 2.97E-01 | 1.74E+00 | 1.74E+00 | 6.47E+01 |
| Hpn | 1.05E+01 | 1.11E-02 | 2.90E-01 | 1.74E+00 | 1.74E+00 | 2.21E+00 |
| Insl6 | 1.15E+01 | 8.93E-03 | 2.79E-01 | 1.74E+00 | 1.74E+00 | 2.43E+00 |
| Adprhl1 | 7.20E+01 | 7.29E-03 | 2.79E-01 | 1.73E+00 | 1.73E+00 | 1.52E+01 |
| Lmo1 | 1.39E+01 | 3.25E-02 | 3.11E-01 | 1.73E+00 | 1.73E+00 | 2.94E+00 |
| Car5b | 1.05E+01 | 6.35E-03 | 2.79E-01 | 1.73E+00 | 1.73E+00 | 2.23E+00 |
| Aff3 | 1.29E+02 | 4.22E-04 | 1.40E-01 | 1.73E+00 | 1.73E+00 | 2.73E+01 |
| Pglyrp4 | 7.72E+00 | 3.32E-02 | 3.11E-01 | 1.73E+00 | 1.73E+00 | 1.63E+00 |
| Recql4 | 1.87E+01 | 5.25E-03 | 2.79E-01 | 1.73E+00 | 1.73E+00 | 3.94E+00 |
| Hbb-bs | 1.03E+03 | 2.44E-02 | 3.02E-01 | 1.73E+00 | 1.73E+00 | 2.17E+02 |
| Ppp2r2b | 1.59E+01 | 1.40E-02 | 2.93E-01 | 1.72E+00 | 1.72E+00 | 3.35E+00 |
| Cthrc1 | 8.41E+01 | 2.07E-03 | 2.14E-01 | 1.72E+00 | 1.72E+00 | 1.77E+01 |
| Camk4 | 2.54E+01 | 1.52E-02 | 2.95E-01 | 1.72E+00 | 1.72E+00 | 5.36E+00 |
| Csf2rb | 2.26E+01 | 2.02E-03 | 2.10E-01 | 1.72E+00 | 1.72E+00 | 4.77E+00 |
| H2-Q4 | 2.40E+01 | 2.16E-02 | 3.01E-01 | 1.72E+00 | 1.72E+00 | 5.06E+00 |
| Ifi30 | 4.53E+01 | 2.94E-02 | 3.10E-01 | 1.71E+00 | 1.71E+00 | 9.54E+00 |
| Hoxa2 | 8.42E+00 | 3.49E-02 | 3.11E-01 | 1.71E+00 | 1.71E+00 | 1.77E+00 |
| Arg2 | 1.02E+01 | 4.32E-02 | 3.17E-01 | 1.71E+00 | 1.71E+00 | 2.14E+00 |
| Sfrp1 | 4.35E+02 | 9.27E-04 | 1.75E-01 | 1.71E+00 | 1.71E+00 | 9.15E+01 |
| Car13 | 1.80E+02 | 1.59E-02 | 2.97E-01 | 1.71E+00 | 1.71E+00 | 3.78E+01 |
| Adgrb2 | 5.72E+01 | 2.45E-03 | 2.29E-01 | 1.71E+00 | 1.71E+00 | 1.20E+01 |
| Cyp1b1 | 2.12E+01 | 1.68E-02 | 2.98E-01 | 1.71E+00 | 1.71E+00 | 4.46E+00 |
| Zcchc18 | 1.22E+01 | 6.58E-03 | 2.79E-01 | 1.71E+00 | 1.71E+00 | 2.56E+00 |
| Slitrk4 | 4.34E+01 | 1.06E-02 | 2.90E-01 | 1.71E+00 | 1.71E+00 | 9.11E+00 |
| Ms4a6d | 7.27E+00 | 3.04E-02 | 3.11E-01 | 1.71E+00 | 1.71E+00 | 1.53E+00 |
| Eya1 | 2.35E+01 | 1.12E-02 | 2.90E-01 | 1.71E+00 | 1.71E+00 | 4.93E+00 |
| Sv2c | 1.28E+01 | 1.54E-02 | 2.95E-01 | 1.70E+00 | 1.70E+00 | 2.68E+00 |
| Thoc5 | 3.69E+01 | 3.92E-02 | 3.17E-01 | 1.70E+00 | 1.70E+00 | 7.74E+00 |
| Nsmce1 | 2.70E+01 | 3.88E-02 | 3.17E-01 | 1.70E+00 | 1.70E+00 | 5.66E+00 |
| Hsd17b2 | 4.64E+01 | 3.04E-02 | 3.11E-01 | 1.70E+00 | 1.70E+00 | 9.74E+00 |
| Plcg2 | 9.54E+00 | 4.16E-02 | 3.17E-01 | 1.70E+00 | 1.70E+00 | 2.00E+00 |
| Acap1 | 6.48E+00 | 4.33E-02 | 3.17E-01 | 1.70E+00 | 1.70E+00 | 1.36E+00 |
| Akr1b8 | 1.03E+01 | 1.83E-02 | 3.01E-01 | 1.70E+00 | 1.70E+00 | 2.16E+00 |
| Slc6a4 | 1.63E+01 | 6.19E-03 | 2.79E-01 | 1.70E+00 | 1.70E+00 | 3.42E+00 |
| Gins1 | 1.54E+01 | 1.40E-02 | 2.93E-01 | 1.69E+00 | 1.69E+00 | 3.22E+00 |
| Ass1 | 7.58E+00 | 2.45E-02 | 3.02E-01 | 1.69E+00 | 1.69E+00 | 1.59E+00 |
| Spon2 | 8.19E+01 | 3.55E-03 | 2.43E-01 | 1.69E+00 | 1.69E+00 | 1.71E+01 |
| Gm43031 | 1.20E+01 | 2.94E-02 | 3.10E-01 | 1.69E+00 | 1.69E+00 | 2.51E+00 |
| Chrm2 | 8.53E+00 | 3.35E-02 | 3.11E-01 | 1.69E+00 | 1.69E+00 | 1.79E+00 |
| Pld4 | 1.16E+01 | 3.52E-02 | 3.11E-01 | 1.69E+00 | 1.69E+00 | 2.42E+00 |
| Parp8 | 3.50E+01 | 6.64E-03 | 2.79E-01 | 1.69E+00 | 1.69E+00 | 7.31E+00 |
| SrpX | 6.30E+01 | 2.90E-03 | 2.34E-01 | 1.69E+00 | 1.69E+00 | 1.32E+01 |
| Gm5424 | 2.44E+02 | 1.35E-03 | 2.01E-01 | 1.68E+00 | 1.68E+00 | 5.10E+01 |

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| Gm3851 | 8.73E+00 | 2.87E-02 | 3.08E-01 | 1.68E+00 | 1.68E+00 | 1.82E+00 |
| Slitrk5 | 7.91E+00 | 1.55E-02 | 2.95E-01 | 1.68E+00 | 1.68E+00 | 1.65E+00 |
| Npl | 7.50E+00 | 1.39E-02 | 2.93E-01 | 1.68E+00 | 1.68E+00 | 1.57E+00 |
| Hand2 | 1.07E+02 | 1.96E-03 | 2.10E-01 | 1.68E+00 | 1.68E+00 | 2.23E+01 |
| Fgf10 | 5.13E+01 | 2.77E-03 | 2.33E-01 | 1.68E+00 | 1.68E+00 | 1.07E+01 |
| Fbxl8 | 8.13E+00 | 2.32E-02 | 3.01E-01 | 1.67E+00 | 1.67E+00 | 1.70E+00 |
| Alx4 | 3.02E+01 | 3.48E-03 | 2.42E-01 | 1.67E+00 | 1.67E+00 | 6.29E+00 |
| Echdc2 | 4.18E+01 | 1.50E-02 | 2.95E-01 | 1.67E+00 | 1.67E+00 | 8.71E+00 |
| Duox1 | 1.70E+02 | 9.51E-03 | 2.83E-01 | 1.67E+00 | 1.67E+00 | 3.55E+01 |
| Dnajc6 | 1.76E+01 | 1.24E-02 | 2.91E-01 | 1.67E+00 | 1.67E+00 | 3.66E+00 |
| Hmha1 | 1.14E+01 | 2.56E-02 | 3.02E-01 | 1.67E+00 | 1.67E+00 | 2.37E+00 |
| Pmaip1 | 4.10E+01 | 4.69E-03 | 2.74E-01 | 1.67E+00 | 1.67E+00 | 8.55E+00 |
| Sox9 | 1.25E+02 | 1.67E-04 | 9.36E-02 | 1.67E+00 | 1.67E+00 | 2.60E+01 |
| Cd53 | 1.04E+01 | 2.28E-02 | 3.01E-01 | 1.66E+00 | 1.66E+00 | 2.17E+00 |
| Epha7 | 1.50E+02 | 2.20E-04 | 1.15E-01 | 1.66E+00 | 1.66E+00 | 3.12E+01 |
| Itgbl1 | 1.16E+01 | 3.70E-02 | 3.15E-01 | 1.66E+00 | 1.66E+00 | 2.42E+00 |
| AI504432 | 1.05E+01 | 7.47E-03 | 2.79E-01 | 1.66E+00 | 1.66E+00 | 2.18E+00 |
| Cdk18 | 3.06E+01 | 3.33E-03 | 2.35E-01 | 1.66E+00 | 1.66E+00 | 6.37E+00 |
| Gm15428 | 2.41E+01 | 2.04E-02 | 3.01E-01 | 1.66E+00 | 1.66E+00 | 5.01E+00 |
| Phlda1 | 7.66E+01 | 1.44E-03 | 2.01E-01 | 1.66E+00 | 1.66E+00 | 1.59E+01 |
| Gxylt2 | 2.56E+02 | 3.64E-05 | 4.36E-02 | 1.66E+00 | 1.66E+00 | 5.31E+01 |
| Rrp9 | 2.77E+01 | 1.44E-02 | 2.93E-01 | 1.66E+00 | 1.66E+00 | 5.76E+00 |
| Bdnf | 4.72E+01 | 8.01E-03 | 2.79E-01 | 1.66E+00 | 1.66E+00 | 9.81E+00 |
| Mir99ahg | 1.71E+01 | 2.66E-02 | 3.04E-01 | 1.66E+00 | 1.66E+00 | 3.55E+00 |
| Ptk2b | 4.31E+01 | 3.42E-02 | 3.11E-01 | 1.65E+00 | 1.65E+00 | 8.95E+00 |
| Tlx1 | 2.68E+01 | 2.82E-03 | 2.33E-01 | 1.65E+00 | 1.65E+00 | 5.56E+00 |
| Dync1i1 | 1.11E+01 | 1.70E-02 | 2.98E-01 | 1.65E+00 | 1.65E+00 | 2.31E+00 |
| Npr3 | 1.84E+02 | 6.34E-04 | 1.53E-01 | 1.65E+00 | 1.65E+00 | 3.82E+01 |
| Gm7665 | 5.21E+01 | 1.03E-02 | 2.89E-01 | 1.65E+00 | 1.65E+00 | 1.08E+01 |
| Wnt10b | 1.17E+01 | 2.20E-02 | 3.01E-01 | 1.65E+00 | 1.65E+00 | 2.42E+00 |
| Tmprss4 | 6.86E+01 | 2.64E-02 | 3.04E-01 | 1.65E+00 | 1.65E+00 | 1.42E+01 |
| Chaf1b | 4.34E+01 | 1.00E-02 | 2.87E-01 | 1.64E+00 | 1.64E+00 | 8.99E+00 |
| Ptpru | 1.67E+02 | 2.43E-03 | 2.29E-01 | 1.64E+00 | 1.64E+00 | 3.45E+01 |
| Scn7a | 9.20E+00 | 3.85E-02 | 3.17E-01 | 1.64E+00 | 1.64E+00 | 1.91E+00 |
| Ptgfr | 2.51E+02 | 4.40E-04 | 1.40E-01 | 1.64E+00 | 1.64E+00 | 5.20E+01 |
| Cd9 | 3.40E+02 | 3.05E-02 | 3.11E-01 | 1.64E+00 | 1.64E+00 | 7.04E+01 |
| Gm26527 | 3.26E+01 | 3.69E-02 | 3.14E-01 | 1.64E+00 | 1.64E+00 | 6.74E+00 |
| Ldhb | 9.46E+01 | 3.28E-02 | 3.11E-01 | 1.63E+00 | 1.63E+00 | 1.96E+01 |
| 2700099C18F | 9.75E+00 | 1.97E-02 | 3.01E-01 | 1.63E+00 | 1.63E+00 | 2.02E+00 |
| Cenpk | 9.08E+00 | 3.70E-02 | 3.15E-01 | 1.63E+00 | 1.63E+00 | 1.88E+00 |
| Gm37509 | 1.02E+01 | 1.44E-02 | 2.93E-01 | 1.63E+00 | 1.63E+00 | 2.11E+00 |
| Dab1 | 8.69E+00 | 8.28E-03 | 2.79E-01 | 1.63E+00 | 1.63E+00 | 1.80E+00 |
| Dapk2 | 1.94E+01 | 5.79E-03 | 2.79E-01 | 1.63E+00 | 1.63E+00 | 4.00E+00 |

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| Me2 | 3.53E+01 | 4.66E-02 | 3.17E-01 | 1.63E+00 | 1.63E+00 | 7.29E+00 |
| Nmi | 7.91E+00 | 3.16E-02 | 3.11E-01 | 1.63E+00 | 1.63E+00 | 1.63E+00 |
| Cbs | 1.51E+01 | 1.00E-02 | 2.87E-01 | 1.62E+00 | 1.62E+00 | 3.12E+00 |
| Lig1 | 6.67E+01 | 2.53E-02 | 3.02E-01 | 1.62E+00 | 1.62E+00 | 1.38E+01 |
| Sema3d | 3.71E+02 | 2.29E-03 | 2.27E-01 | 1.62E+00 | 1.62E+00 | 7.64E+01 |
| Arntl2 | 4.29E+01 | 8.67E-03 | 2.79E-01 | 1.62E+00 | 1.62E+00 | 8.85E+00 |
| Prokr1 | 4.06E+01 | 7.10E-03 | 2.79E-01 | 1.62E+00 | 1.62E+00 | 8.38E+00 |
| Hmgb2 | 1.14E+02 | 2.18E-02 | 3.01E-01 | 1.62E+00 | 1.62E+00 | 2.36E+01 |
| Ucp2 | 6.11E+02 | 1.47E-03 | 2.01E-01 | 1.62E+00 | 1.62E+00 | 1.26E+02 |
| St3gal4 | 1.09E+02 | 5.91E-04 | 1.52E-01 | 1.62E+00 | 1.62E+00 | 2.25E+01 |
| Cfh | 1.68E+01 | 3.34E-02 | 3.11E-01 | 1.62E+00 | 1.62E+00 | 3.47E+00 |
| Foxc2 | 1.69E+01 | 4.01E-03 | 2.52E-01 | 1.62E+00 | 1.62E+00 | 3.48E+00 |
| Cdh19 | 1.53E+01 | 2.13E-02 | 3.01E-01 | 1.62E+00 | 1.62E+00 | 3.15E+00 |
| Mgat5b | 1.30E+01 | 1.81E-02 | 2.99E-01 | 1.62E+00 | 1.62E+00 | 2.68E+00 |
| Egfl8 | 1.06E+01 | 1.05E-02 | 2.90E-01 | 1.62E+00 | 1.62E+00 | 2.17E+00 |
| Has2 | 9.53E+01 | 1.28E-03 | 2.01E-01 | 1.61E+00 | 1.61E+00 | 1.96E+01 |
| Ndr4 | 1.49E+02 | 2.73E-03 | 2.33E-01 | 1.61E+00 | 1.61E+00 | 3.06E+01 |
| Ly6e | 4.01E+02 | 4.95E-04 | 1.43E-01 | 1.61E+00 | 1.61E+00 | 8.25E+01 |
| Arl4c | 1.38E+02 | 1.32E-03 | 2.01E-01 | 1.61E+00 | 1.61E+00 | 2.85E+01 |
| Mmp23 | 2.16E+01 | 1.81E-02 | 2.99E-01 | 1.61E+00 | 1.61E+00 | 4.44E+00 |
| Pik3ip1 | 3.81E+01 | 3.63E-03 | 2.44E-01 | 1.61E+00 | 1.61E+00 | 7.83E+00 |
| Loxl4 | 7.02E+00 | 1.74E-02 | 2.99E-01 | 1.61E+00 | 1.61E+00 | 1.44E+00 |
| Ttk | 3.92E+01 | 8.25E-03 | 2.79E-01 | 1.61E+00 | 1.61E+00 | 8.06E+00 |
| Ccdc177 | 9.81E+00 | 1.86E-02 | 3.01E-01 | 1.61E+00 | 1.61E+00 | 2.02E+00 |
| Arsj | 4.48E+01 | 6.08E-03 | 2.79E-01 | 1.61E+00 | 1.61E+00 | 9.20E+00 |
| Mgmt | 7.95E+00 | 1.51E-02 | 2.95E-01 | 1.61E+00 | 1.61E+00 | 1.63E+00 |
| Kcnn4 | 6.57E+00 | 4.28E-02 | 3.17E-01 | 1.61E+00 | 1.61E+00 | 1.35E+00 |
| Mcm7 | 1.53E+02 | 2.07E-02 | 3.01E-01 | 1.61E+00 | 1.61E+00 | 3.14E+01 |
| Tll1 | 1.75E+01 | 1.24E-02 | 2.91E-01 | 1.61E+00 | 1.61E+00 | 3.60E+00 |
| Smyd2 | 6.84E+01 | 1.24E-02 | 2.91E-01 | 1.61E+00 | 1.61E+00 | 1.40E+01 |
| Tmem181a | 8.88E+01 | 3.16E-02 | 3.11E-01 | 1.60E+00 | 1.60E+00 | 1.82E+01 |
| Srgn | 1.61E+01 | 1.89E-02 | 3.01E-01 | 1.60E+00 | 1.60E+00 | 3.30E+00 |
| Unc5c | 1.70E+01 | 1.45E-02 | 2.93E-01 | 1.60E+00 | 1.60E+00 | 3.49E+00 |
| P2ry12 | 1.07E+01 | 2.74E-02 | 3.05E-01 | 1.60E+00 | 1.60E+00 | 2.20E+00 |
| Slc1a3 | 1.13E+02 | 1.97E-03 | 2.10E-01 | 1.60E+00 | 1.60E+00 | 2.31E+01 |
| AC132393.1 | 1.80E+01 | 4.47E-02 | 3.17E-01 | 1.60E+00 | 1.60E+00 | 3.68E+00 |
| Mdm1 | 2.89E+01 | 6.37E-03 | 2.79E-01 | 1.60E+00 | 1.60E+00 | 5.93E+00 |
| Thy1 | 8.61E+01 | 2.36E-03 | 2.28E-01 | 1.60E+00 | 1.60E+00 | 1.77E+01 |
| Kntc1 | 3.77E+01 | 1.25E-02 | 2.91E-01 | 1.60E+00 | 1.60E+00 | 7.73E+00 |
| Lipg | 4.09E+01 | 2.48E-02 | 3.02E-01 | 1.60E+00 | 1.60E+00 | 8.39E+00 |
| Ctsc | 2.78E+02 | 6.90E-04 | 1.60E-01 | 1.59E+00 | 1.59E+00 | 5.69E+01 |
| Barx2 | 2.89E+02 | 8.51E-03 | 2.79E-01 | 1.59E+00 | 1.59E+00 | 5.92E+01 |
| Figf | 6.93E+01 | 8.21E-04 | 1.61E-01 | 1.59E+00 | 1.59E+00 | 1.42E+01 |

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| Efcab11 | 9.62E+00 | 3.63E-02 | 3.13E-01 | 1.59E+00 | 1.59E+00 | 1.97E+00 |
| Haus5 | 1.86E+01 | 2.78E-02 | 3.05E-01 | 1.59E+00 | 1.59E+00 | 3.81E+00 |
| Pyroxd2 | 1.64E+01 | 4.86E-02 | 3.19E-01 | 1.59E+00 | 1.59E+00 | 3.36E+00 |
| Gm16534 | 1.52E+01 | 2.28E-02 | 3.01E-01 | 1.59E+00 | 1.59E+00 | 3.11E+00 |
| Bckdhb | 3.84E+01 | 4.80E-02 | 3.18E-01 | 1.59E+00 | 1.59E+00 | 7.87E+00 |
| Fam20a | 2.16E+01 | 1.26E-02 | 2.91E-01 | 1.59E+00 | 1.59E+00 | 4.43E+00 |
| Rab30 | 3.11E+01 | 1.49E-03 | 2.02E-01 | 1.59E+00 | 1.59E+00 | 6.37E+00 |
| Ptprc | 1.18E+01 | 2.07E-02 | 3.01E-01 | 1.59E+00 | 1.59E+00 | 2.41E+00 |
| Lancl3 | 7.10E+00 | 2.31E-02 | 3.01E-01 | 1.59E+00 | 1.59E+00 | 1.45E+00 |
| Gm14328 | 2.86E+02 | 2.21E-02 | 3.01E-01 | 1.59E+00 | 1.59E+00 | 5.84E+01 |
| Sox10 | 9.55E+01 | 1.07E-02 | 2.90E-01 | 1.59E+00 | 1.59E+00 | 1.95E+01 |
| Dpyd | 2.64E+01 | 8.07E-03 | 2.79E-01 | 1.59E+00 | 1.59E+00 | 5.40E+00 |
| Fahd2a | 1.65E+01 | 3.61E-02 | 3.12E-01 | 1.58E+00 | 1.58E+00 | 3.37E+00 |
| Scube3 | 6.04E+01 | 1.92E-03 | 2.10E-01 | 1.58E+00 | 1.58E+00 | 1.23E+01 |
| Col4a6 | 2.00E+02 | 8.33E-03 | 2.79E-01 | 1.58E+00 | 1.58E+00 | 4.08E+01 |
| Myof | 1.44E+02 | 1.37E-02 | 2.93E-01 | 1.58E+00 | 1.58E+00 | 2.95E+01 |
| Edil3 | 1.13E+01 | 4.10E-02 | 3.17E-01 | 1.58E+00 | 1.58E+00 | 2.31E+00 |
| Alox12 | 8.29E+01 | 2.52E-02 | 3.02E-01 | 1.58E+00 | 1.58E+00 | 1.69E+01 |
| 9330154J02R | 8.45E+00 | 1.37E-02 | 2.93E-01 | 1.58E+00 | 1.58E+00 | 1.72E+00 |
| Trpc4 | 1.43E+01 | 3.69E-02 | 3.15E-01 | 1.58E+00 | 1.58E+00 | 2.93E+00 |
| Pdgfc | 8.40E+01 | 1.38E-03 | 2.01E-01 | 1.58E+00 | 1.58E+00 | 1.71E+01 |
| Kif18a | 3.78E+01 | 2.84E-03 | 2.33E-01 | 1.57E+00 | 1.57E+00 | 7.71E+00 |
| Rgs11 | 2.54E+01 | 2.77E-02 | 3.05E-01 | 1.57E+00 | 1.57E+00 | 5.18E+00 |
| Paqr6 | 9.73E+00 | 4.69E-02 | 3.17E-01 | 1.57E+00 | 1.57E+00 | 1.98E+00 |
| Ccdc106 | 2.54E+01 | 7.14E-03 | 2.79E-01 | 1.57E+00 | 1.57E+00 | 5.18E+00 |
| Fblim1 | 6.58E+01 | 1.56E-03 | 2.02E-01 | 1.57E+00 | 1.57E+00 | 1.34E+01 |
| Gm29397 | 3.66E+01 | 4.62E-02 | 3.17E-01 | 1.57E+00 | 1.57E+00 | 7.45E+00 |
| Anxa2 | 8.76E+02 | 6.08E-03 | 2.79E-01 | 1.57E+00 | 1.57E+00 | 1.78E+02 |
| Cyth4 | 2.06E+01 | 1.29E-02 | 2.93E-01 | 1.57E+00 | 1.57E+00 | 4.20E+00 |
| Ugt1a7c | 3.21E+01 | 3.55E-02 | 3.11E-01 | 1.57E+00 | 1.57E+00 | 6.52E+00 |
| Adamts18 | 5.38E+01 | 6.17E-03 | 2.79E-01 | 1.57E+00 | 1.57E+00 | 1.10E+01 |
| Nacad | 6.75E+00 | 2.47E-02 | 3.02E-01 | 1.57E+00 | 1.57E+00 | 1.37E+00 |
| Oplah | 7.31E+01 | 1.68E-02 | 2.98E-01 | 1.57E+00 | 1.57E+00 | 1.49E+01 |
| Gm16379 | 3.86E+01 | 2.81E-02 | 3.05E-01 | 1.57E+00 | 1.57E+00 | 7.85E+00 |
| Adcy7 | 1.09E+02 | 7.88E-04 | 1.61E-01 | 1.57E+00 | 1.57E+00 | 2.21E+01 |
| Cp | 1.32E+01 | 3.29E-02 | 3.11E-01 | 1.57E+00 | 1.57E+00 | 2.68E+00 |
| Sv2b | 2.32E+01 | 1.60E-02 | 2.97E-01 | 1.57E+00 | 1.57E+00 | 4.72E+00 |
| Cpne8 | 4.75E+01 | 7.25E-03 | 2.79E-01 | 1.57E+00 | 1.57E+00 | 9.66E+00 |
| Tcf7 | 3.62E+01 | 8.98E-03 | 2.79E-01 | 1.56E+00 | 1.56E+00 | 7.35E+00 |
| Tmem237 | 2.08E+01 | 3.21E-02 | 3.11E-01 | 1.56E+00 | 1.56E+00 | 4.22E+00 |
| Wee1 | 3.62E+01 | 2.67E-02 | 3.04E-01 | 1.56E+00 | 1.56E+00 | 7.36E+00 |
| N6amt2 | 2.53E+01 | 3.81E-02 | 3.17E-01 | 1.56E+00 | 1.56E+00 | 5.13E+00 |
| Tnfrsf11a | 1.56E+01 | 1.22E-02 | 2.91E-01 | 1.56E+00 | 1.56E+00 | 3.17E+00 |

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| Cstb | 1.08E+02 | 1.34E-02 | 2.93E-01 | 1.56E+00 | 1.56E+00 | 2.19E+01 |
| Mkx | 2.21E+01 | 3.17E-03 | 2.35E-01 | 1.56E+00 | 1.56E+00 | 4.49E+00 |
| Lrat | 1.31E+01 | 3.84E-02 | 3.17E-01 | 1.56E+00 | 1.56E+00 | 2.66E+00 |
| Spo11 | 2.21E+01 | 1.04E-02 | 2.90E-01 | 1.56E+00 | 1.56E+00 | 4.49E+00 |
| Rpl35a-ps5 | 7.19E+00 | 4.08E-02 | 3.17E-01 | 1.56E+00 | 1.56E+00 | 1.46E+00 |
| Rplp0 | 1.65E+03 | 3.38E-02 | 3.11E-01 | 1.56E+00 | 1.56E+00 | 3.35E+02 |
| Gm20467 | 1.59E+01 | 3.62E-02 | 3.12E-01 | 1.56E+00 | 1.56E+00 | 3.22E+00 |
| 1700030J22R | 7.73E+00 | 2.05E-02 | 3.01E-01 | 1.56E+00 | 1.56E+00 | 1.57E+00 |
| Gm19807 | 3.76E+01 | 7.74E-03 | 2.79E-01 | 1.55E+00 | 1.55E+00 | 7.63E+00 |
| Khdrbs3 | 2.75E+01 | 4.47E-02 | 3.17E-01 | 1.55E+00 | 1.55E+00 | 5.58E+00 |
| Poc1a | 1.44E+01 | 2.02E-02 | 3.01E-01 | 1.55E+00 | 1.55E+00 | 2.93E+00 |
| Azin2 | 2.90E+01 | 6.33E-03 | 2.79E-01 | 1.55E+00 | 1.55E+00 | 5.88E+00 |
| Angptl4 | 2.41E+01 | 3.14E-03 | 2.35E-01 | 1.55E+00 | 1.55E+00 | 4.88E+00 |
| Fcgr3 | 2.90E+01 | 8.89E-03 | 2.79E-01 | 1.55E+00 | 1.55E+00 | 5.88E+00 |
| Cdc25c | 1.88E+01 | 2.73E-02 | 3.05E-01 | 1.55E+00 | 1.55E+00 | 3.82E+00 |
| Fbln2 | 2.81E+02 | 2.09E-03 | 2.14E-01 | 1.55E+00 | 1.55E+00 | 5.69E+01 |
| Ldhd | 7.99E+00 | 1.62E-02 | 2.97E-01 | 1.55E+00 | 1.55E+00 | 1.62E+00 |
| Nckap1l | 1.85E+01 | 3.46E-02 | 3.11E-01 | 1.55E+00 | 1.55E+00 | 3.74E+00 |
| Tap1 | 2.69E+01 | 1.37E-02 | 2.93E-01 | 1.55E+00 | 1.55E+00 | 5.46E+00 |
| Dmtn | 1.18E+01 | 1.76E-02 | 2.99E-01 | 1.55E+00 | 1.55E+00 | 2.39E+00 |
| Fam216a | 2.94E+01 | 2.78E-02 | 3.05E-01 | 1.55E+00 | 1.55E+00 | 5.95E+00 |
| Stag3 | 2.45E+01 | 4.29E-02 | 3.17E-01 | 1.55E+00 | 1.55E+00 | 4.96E+00 |
| Syt9 | 2.43E+01 | 3.79E-03 | 2.45E-01 | 1.54E+00 | 1.54E+00 | 4.91E+00 |
| Cat | 2.55E+02 | 4.76E-03 | 2.75E-01 | 1.54E+00 | 1.54E+00 | 5.16E+01 |
| Kctd14 | 2.78E+01 | 1.63E-02 | 2.97E-01 | 1.54E+00 | 1.54E+00 | 5.62E+00 |
| Krt17 | 3.85E+03 | 1.73E-02 | 2.99E-01 | 1.54E+00 | 1.54E+00 | 7.78E+02 |
| Snph | 1.57E+01 | 1.12E-02 | 2.90E-01 | 1.54E+00 | 1.54E+00 | 3.17E+00 |
| Muc20 | 6.55E+00 | 4.31E-02 | 3.17E-01 | 1.54E+00 | 1.54E+00 | 1.32E+00 |
| Mecr | 2.78E+01 | 3.82E-02 | 3.17E-01 | 1.54E+00 | 1.54E+00 | 5.63E+00 |
| Sp3os | 8.92E+00 | 1.51E-02 | 2.95E-01 | 1.54E+00 | 1.54E+00 | 1.80E+00 |
| Enkd1 | 2.69E+01 | 1.11E-02 | 2.90E-01 | 1.54E+00 | 1.54E+00 | 5.43E+00 |
| Ypel4 | 1.01E+01 | 2.86E-02 | 3.08E-01 | 1.54E+00 | 1.54E+00 | 2.05E+00 |
| Cd302 | 2.23E+01 | 4.60E-02 | 3.17E-01 | 1.54E+00 | 1.54E+00 | 4.50E+00 |
| Gm8210 | 1.31E+02 | 4.11E-02 | 3.17E-01 | 1.54E+00 | 1.54E+00 | 2.65E+01 |
| Mctp1 | 8.46E+00 | 2.23E-02 | 3.01E-01 | 1.54E+00 | 1.54E+00 | 1.71E+00 |
| Fam155a | 1.68E+01 | 1.40E-02 | 2.93E-01 | 1.54E+00 | 1.54E+00 | 3.39E+00 |
| Pgm3 | 2.37E+01 | 2.89E-02 | 3.08E-01 | 1.54E+00 | 1.54E+00 | 4.78E+00 |
| Mpped1 | 1.83E+01 | 4.34E-02 | 3.17E-01 | 1.53E+00 | 1.53E+00 | 3.70E+00 |
| Krt5 | 1.17E+04 | 2.35E-02 | 3.02E-01 | 1.53E+00 | 1.53E+00 | 2.36E+03 |
| Fam210b | 1.38E+02 | 1.94E-03 | 2.10E-01 | 1.53E+00 | 1.53E+00 | 2.78E+01 |
| S100a6 | 2.73E+02 | 1.07E-02 | 2.90E-01 | 1.53E+00 | 1.53E+00 | 5.50E+01 |
| Ecm1 | 3.67E+02 | 3.51E-02 | 3.11E-01 | 1.53E+00 | 1.53E+00 | 7.39E+01 |
| Irak1bp1 | 2.22E+01 | 4.59E-02 | 3.17E-01 | 1.53E+00 | 1.53E+00 | 4.48E+00 |

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| Dpt | 9.33E+02 | 2.33E-03 | 2.28E-01 | 1.53E+00 | 1.53E+00 | 1.88E+02 |
| Gcnt1 | 3.97E+01 | 1.58E-02 | 2.97E-01 | 1.53E+00 | 1.53E+00 | 8.00E+00 |
| Tatdn3 | 2.22E+01 | 4.19E-03 | 2.58E-01 | 1.53E+00 | 1.53E+00 | 4.47E+00 |
| Fam92a | 7.86E+01 | 4.27E-02 | 3.17E-01 | 1.53E+00 | 1.53E+00 | 1.58E+01 |
| Dzank1 | 7.39E+00 | 2.14E-02 | 3.01E-01 | 1.53E+00 | 1.53E+00 | 1.49E+00 |
| Gm6682 | 1.10E+02 | 3.29E-02 | 3.11E-01 | 1.53E+00 | 1.53E+00 | 2.21E+01 |
| Tcap | 1.60E+02 | 4.35E-04 | 1.40E-01 | 1.53E+00 | 1.53E+00 | 3.22E+01 |
| Kif23 | 1.04E+02 | 1.31E-02 | 2.93E-01 | 1.53E+00 | 1.53E+00 | 2.10E+01 |
| Igfbp6 | 5.68E+01 | 7.97E-03 | 2.79E-01 | 1.53E+00 | 1.53E+00 | 1.14E+01 |
| Artn | 2.11E+01 | 2.57E-02 | 3.02E-01 | 1.53E+00 | 1.53E+00 | 4.26E+00 |
| 1700088E04F | 8.34E+00 | 4.62E-02 | 3.17E-01 | 1.53E+00 | 1.53E+00 | 1.68E+00 |
| Pdlim4 | 1.32E+02 | 2.88E-02 | 3.08E-01 | 1.53E+00 | 1.53E+00 | 2.66E+01 |
| Sfrp2 | 1.95E+02 | 1.18E-02 | 2.91E-01 | 1.52E+00 | 1.52E+00 | 3.92E+01 |
| Elf3 | 7.07E+01 | 4.25E-02 | 3.17E-01 | 1.52E+00 | 1.52E+00 | 1.42E+01 |
| Serpib9 | 2.60E+01 | 8.23E-03 | 2.79E-01 | 1.52E+00 | 1.52E+00 | 5.23E+00 |
| Duoxa1 | 1.25E+02 | 2.21E-02 | 3.01E-01 | 1.52E+00 | 1.52E+00 | 2.51E+01 |
| Orc6 | 6.16E+01 | 8.47E-03 | 2.79E-01 | 1.52E+00 | 1.52E+00 | 1.24E+01 |
| Hmgb1 | 4.31E+02 | 5.63E-03 | 2.79E-01 | 1.52E+00 | 1.52E+00 | 8.67E+01 |
| Sh3rf2 | 1.18E+02 | 1.77E-02 | 2.99E-01 | 1.52E+00 | 1.52E+00 | 2.38E+01 |
| Lrig3 | 2.11E+02 | 5.60E-03 | 2.79E-01 | 1.52E+00 | 1.52E+00 | 4.24E+01 |
| Cpne7 | 2.52E+01 | 2.19E-02 | 3.01E-01 | 1.52E+00 | 1.52E+00 | 5.08E+00 |
| Esm1 | 2.11E+01 | 1.41E-02 | 2.93E-01 | 1.52E+00 | 1.52E+00 | 4.25E+00 |
| Pfkp | 1.60E+02 | 1.19E-02 | 2.91E-01 | 1.52E+00 | 1.52E+00 | 3.21E+01 |
| Mnd1-ps | 2.17E+01 | 3.31E-02 | 3.11E-01 | 1.52E+00 | 1.52E+00 | 4.37E+00 |
| Prr7 | 2.16E+01 | 8.66E-03 | 2.79E-01 | 1.52E+00 | 1.52E+00 | 4.34E+00 |
| Has3 | 2.77E+02 | 1.46E-02 | 2.93E-01 | 1.52E+00 | 1.52E+00 | 5.56E+01 |
| Cfap36 | 3.94E+01 | 2.87E-02 | 3.08E-01 | 1.52E+00 | 1.52E+00 | 7.93E+00 |
| Gm10125 | 1.09E+01 | 1.25E-02 | 2.91E-01 | 1.52E+00 | 1.52E+00 | 2.20E+00 |
| Il17d | 2.19E+01 | 1.58E-02 | 2.97E-01 | 1.52E+00 | 1.52E+00 | 4.40E+00 |
| Efcc1 | 8.58E+00 | 3.48E-02 | 3.11E-01 | 1.52E+00 | 1.52E+00 | 1.72E+00 |
| Gm10169 | 1.71E+02 | 4.11E-02 | 3.17E-01 | 1.52E+00 | 1.52E+00 | 3.44E+01 |
| Rps26 | 1.35E+02 | 4.90E-02 | 3.19E-01 | 1.52E+00 | 1.52E+00 | 2.71E+01 |
| Adgrd1 | 4.86E+01 | 1.39E-02 | 2.93E-01 | 1.51E+00 | 1.51E+00 | 9.76E+00 |
| Tapbpl | 1.59E+01 | 9.42E-03 | 2.82E-01 | 1.51E+00 | 1.51E+00 | 3.18E+00 |
| Flnb | 4.33E+02 | 2.54E-03 | 2.31E-01 | 1.51E+00 | 1.51E+00 | 8.70E+01 |
| Vat1l | 1.71E+01 | 3.64E-02 | 3.13E-01 | 1.51E+00 | 1.51E+00 | 3.44E+00 |
| Mamdc2 | 1.07E+01 | 2.39E-02 | 3.02E-01 | 1.51E+00 | 1.51E+00 | 2.15E+00 |
| Utp14b | 6.64E+01 | 5.39E-03 | 2.79E-01 | 1.51E+00 | 1.51E+00 | 1.33E+01 |
| Cenpl | 5.89E+01 | 1.96E-03 | 2.10E-01 | 1.51E+00 | 1.51E+00 | 1.18E+01 |
| Abi3bp | 1.20E+02 | 1.82E-02 | 3.00E-01 | 1.51E+00 | 1.51E+00 | 2.41E+01 |
| Susd1 | 1.60E+01 | 3.17E-02 | 3.11E-01 | 1.51E+00 | 1.51E+00 | 3.21E+00 |
| Col14a1 | 2.68E+02 | 1.30E-02 | 2.93E-01 | 1.51E+00 | 1.51E+00 | 5.37E+01 |
| Edar | 7.70E+00 | 4.16E-02 | 3.17E-01 | 1.51E+00 | 1.51E+00 | 1.54E+00 |

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| Lgals7 | 5.51E+02 | 4.07E-02 | 3.17E-01 | 1.51E+00 | 1.51E+00 | 1.11E+02 |
| Ell2 | 2.30E+02 | 2.56E-02 | 3.02E-01 | 1.51E+00 | 1.51E+00 | 4.61E+01 |
| Ints8 | 6.20E+01 | 3.67E-02 | 3.14E-01 | 1.51E+00 | 1.51E+00 | 1.24E+01 |
| Cep70 | 2.29E+01 | 8.10E-03 | 2.79E-01 | 1.51E+00 | 1.51E+00 | 4.60E+00 |
| 2700062C07F | 2.39E+01 | 2.91E-02 | 3.09E-01 | 1.51E+00 | 1.51E+00 | 4.79E+00 |
| Plaur | 1.03E+01 | 2.45E-02 | 3.02E-01 | 1.51E+00 | 1.51E+00 | 2.06E+00 |
| Bub1 | 6.25E+01 | 3.34E-02 | 3.11E-01 | 1.51E+00 | 1.51E+00 | 1.25E+01 |
| 5530601H04F | 5.86E+01 | 1.40E-03 | 2.01E-01 | 1.51E+00 | 1.51E+00 | 1.17E+01 |
| Slco4a1 | 2.88E+01 | 2.16E-02 | 3.01E-01 | 1.51E+00 | 1.51E+00 | 5.78E+00 |
| Gm6485 | 1.55E+02 | 3.58E-02 | 3.11E-01 | 1.51E+00 | 1.51E+00 | 3.10E+01 |
| Engase | 2.52E+01 | 1.51E-02 | 2.95E-01 | 1.51E+00 | 1.51E+00 | 5.04E+00 |
| Gm43609 | 8.94E+00 | 4.10E-02 | 3.17E-01 | 1.51E+00 | 1.51E+00 | 1.79E+00 |
| Prom1 | 4.43E+01 | 3.46E-02 | 3.11E-01 | 1.51E+00 | 1.51E+00 | 8.88E+00 |
| Ptn | 4.45E+02 | 1.11E-03 | 1.90E-01 | 1.51E+00 | 1.51E+00 | 8.92E+01 |
| Stx1a | 4.22E+01 | 1.87E-03 | 2.10E-01 | 1.51E+00 | 1.51E+00 | 8.45E+00 |
| Ucp3 | 1.01E+01 | 4.87E-02 | 3.19E-01 | 1.50E+00 | 1.50E+00 | 2.02E+00 |
| Cdh24 | 4.01E+01 | 2.71E-03 | 2.33E-01 | 1.50E+00 | 1.50E+00 | 8.03E+00 |
| Gas8 | 2.87E+01 | 4.76E-02 | 3.18E-01 | 1.50E+00 | 1.50E+00 | 5.75E+00 |
| Fam184b | 1.14E+01 | 4.81E-02 | 3.18E-01 | 1.50E+00 | 1.50E+00 | 2.29E+00 |
| Osr1 | 6.40E+01 | 2.83E-03 | 2.33E-01 | 1.50E+00 | 1.50E+00 | 1.28E+01 |
| Mgarp | 2.04E+01 | 4.43E-02 | 3.17E-01 | 1.50E+00 | 1.50E+00 | 4.08E+00 |
| Gm13597 | 4.98E+01 | 2.54E-02 | 3.02E-01 | 1.50E+00 | 1.50E+00 | 9.97E+00 |
| Mmp2 | 9.97E+02 | 5.56E-03 | 2.79E-01 | 1.50E+00 | 1.50E+00 | 1.99E+02 |
| Rgs4 | 2.67E+01 | 2.80E-02 | 3.05E-01 | 1.50E+00 | 1.50E+00 | 5.35E+00 |
| Cenph | 2.14E+01 | 4.67E-02 | 3.17E-01 | 1.50E+00 | 1.50E+00 | 4.28E+00 |
| 1700048O20I | 1.56E+01 | 2.43E-02 | 3.02E-01 | 1.50E+00 | 1.50E+00 | 3.12E+00 |
| Klk1b26 | 1.91E+01 | 4.79E-02 | 3.18E-01 | 1.50E+00 | 1.50E+00 | 3.81E+00 |
| H2afz | 2.91E+02 | 4.78E-02 | 3.18E-01 | 1.50E+00 | 1.50E+00 | 5.82E+01 |
| Lxn | 4.74E+01 | 1.77E-02 | 2.99E-01 | 1.50E+00 | 1.50E+00 | 9.47E+00 |
| Lrrc4 | 3.49E+01 | 8.34E-03 | 2.79E-01 | 1.50E+00 | 1.50E+00 | 6.96E+00 |
| Dsg3 | 7.33E+02 | 4.63E-02 | 3.17E-01 | 1.50E+00 | 1.50E+00 | 1.47E+02 |
| Syce2 | 2.08E+01 | 1.99E-02 | 3.01E-01 | 1.50E+00 | 1.50E+00 | 4.15E+00 |
| Chst10 | 1.66E+01 | 9.93E-03 | 2.86E-01 | 1.50E+00 | 1.50E+00 | 3.31E+00 |

176 down-reguated gene in Fst-/- (P<=0.05 1.5 Folds change)

| Gene ID | Total counts | P-value (mut) | FDR step up | Ratio (mutant) | Fold change (LSMean(mutant)) | LSMean(mutant) |
|---------|--------------|---------------|-------------|----------------|------------------------------|----------------|
| Slc17a7 | 2.04E+01 | 1.35E-04 | 7.81E-02 | 1.80E-01 | -5.55E+00 | 1.04E+00 |
| Tmem72 | 4.64E+01 | 6.19E-06 | 1.58E-02 | 1.84E-01 | -5.45E+00 | 2.40E+00 |
| Rxfp1 | 1.86E+01 | 6.28E-06 | 1.58E-02 | 2.20E-01 | -4.54E+00 | 1.12E+00 |
| Krt76 | 6.66E+02 | 2.77E-03 | 2.33E-01 | 2.28E-01 | -4.39E+00 | 4.12E+01 |
| Aqp4 | 1.60E+02 | 6.03E-03 | 2.79E-01 | 2.44E-01 | -4.10E+00 | 1.05E+01 |
| Hrnr | 1.65E+02 | 8.38E-04 | 1.61E-01 | 2.44E-01 | -4.09E+00 | 1.08E+01 |
| Nts | 8.14E+00 | 5.91E-04 | 1.52E-01 | 2.80E-01 | -3.57E+00 | 5.94E-01 |

| | | | | | | |
|-------------|----------|----------|----------|----------|-----------|----------|
| Otx1 | 1.70E+01 | 7.55E-05 | 5.41E-02 | 2.90E-01 | -3.45E+00 | 1.28E+00 |
| Tchh | 1.62E+03 | 5.06E-03 | 2.79E-01 | 3.23E-01 | -3.10E+00 | 1.32E+02 |
| Crnn | 2.77E+02 | 1.03E-02 | 2.89E-01 | 3.26E-01 | -3.07E+00 | 2.27E+01 |
| Mybpc2 | 1.91E+02 | 6.79E-03 | 2.79E-01 | 3.53E-01 | -2.83E+00 | 1.66E+01 |
| Fndc9 | 3.48E+01 | 8.87E-03 | 2.79E-01 | 3.53E-01 | -2.83E+00 | 3.02E+00 |
| Il12a | 9.92E+00 | 4.89E-02 | 3.19E-01 | 3.67E-01 | -2.72E+00 | 8.88E-01 |
| Muc19 | 5.32E+01 | 4.86E-04 | 1.43E-01 | 3.79E-01 | -2.64E+00 | 4.87E+00 |
| Tmem56 | 6.51E+01 | 5.77E-04 | 1.52E-01 | 3.79E-01 | -2.64E+00 | 5.97E+00 |
| Gpd1 | 2.67E+02 | 3.39E-03 | 2.37E-01 | 3.96E-01 | -2.52E+00 | 2.53E+01 |
| Rpl3l | 2.05E+01 | 2.03E-02 | 3.01E-01 | 4.08E-01 | -2.45E+00 | 1.98E+00 |
| Pcdh10 | 6.06E+01 | 7.06E-06 | 1.58E-02 | 4.09E-01 | -2.45E+00 | 5.87E+00 |
| Flg | 8.78E+01 | 7.13E-03 | 2.79E-01 | 4.13E-01 | -2.42E+00 | 8.56E+00 |
| Mstn | 1.27E+02 | 4.53E-03 | 2.70E-01 | 4.16E-01 | -2.40E+00 | 1.24E+01 |
| Asb15 | 1.27E+01 | 1.62E-03 | 2.04E-01 | 4.25E-01 | -2.36E+00 | 1.26E+00 |
| 2310034C09F | 5.07E+02 | 3.54E-02 | 3.11E-01 | 4.28E-01 | -2.33E+00 | 5.07E+01 |
| Gm2115 | 1.65E+01 | 6.66E-03 | 2.79E-01 | 4.31E-01 | -2.32E+00 | 1.66E+00 |
| Abcb4 | 1.21E+01 | 3.78E-03 | 2.45E-01 | 4.36E-01 | -2.29E+00 | 1.23E+00 |
| Asb11 | 7.29E+00 | 3.02E-02 | 3.10E-01 | 4.40E-01 | -2.27E+00 | 7.42E-01 |
| Gm15759 | 7.33E+00 | 1.75E-02 | 2.99E-01 | 4.43E-01 | -2.26E+00 | 7.50E-01 |
| Kcnf1 | 1.34E+01 | 6.02E-04 | 1.52E-01 | 4.53E-01 | -2.21E+00 | 1.40E+00 |
| Kcnj3 | 5.43E+01 | 3.93E-04 | 1.40E-01 | 4.54E-01 | -2.20E+00 | 5.65E+00 |
| 2310065F04F | 1.07E+01 | 8.97E-03 | 2.79E-01 | 4.59E-01 | -2.18E+00 | 1.12E+00 |
| Fgf6 | 6.11E+01 | 7.32E-05 | 5.41E-02 | 4.61E-01 | -2.17E+00 | 6.43E+00 |
| Krt24 | 4.74E+02 | 2.01E-03 | 2.10E-01 | 4.66E-01 | -2.15E+00 | 5.02E+01 |
| C130080G10I | 7.74E+01 | 5.24E-03 | 2.79E-01 | 4.66E-01 | -2.15E+00 | 8.20E+00 |
| Sprr2g | 1.97E+01 | 7.71E-03 | 2.79E-01 | 4.68E-01 | -2.14E+00 | 2.09E+00 |
| Cldn2 | 6.28E+01 | 2.24E-03 | 2.24E-01 | 4.68E-01 | -2.14E+00 | 6.68E+00 |
| C130079G13I | 8.85E+00 | 7.31E-03 | 2.79E-01 | 4.72E-01 | -2.12E+00 | 9.45E-01 |
| Myoz1 | 7.00E+02 | 3.77E-03 | 2.45E-01 | 4.73E-01 | -2.12E+00 | 7.49E+01 |
| Krt33b | 1.11E+01 | 3.45E-02 | 3.11E-01 | 4.83E-01 | -2.07E+00 | 1.20E+00 |
| Lrrc38 | 2.30E+01 | 6.61E-03 | 2.79E-01 | 4.89E-01 | -2.04E+00 | 2.52E+00 |
| Zbed6 | 1.56E+01 | 3.91E-02 | 3.17E-01 | 4.93E-01 | -2.03E+00 | 1.72E+00 |
| Asb12 | 6.06E+01 | 1.13E-03 | 1.92E-01 | 4.97E-01 | -2.01E+00 | 6.71E+00 |
| Tnfrsf13c | 9.38E+00 | 7.80E-03 | 2.79E-01 | 4.97E-01 | -2.01E+00 | 1.04E+00 |
| Pou4f1 | 7.28E+00 | 2.99E-02 | 3.10E-01 | 4.99E-01 | -2.01E+00 | 8.07E-01 |
| Lce3f | 1.31E+02 | 3.28E-02 | 3.11E-01 | 5.00E-01 | -2.00E+00 | 1.45E+01 |
| Edn2 | 1.46E+01 | 1.37E-03 | 2.01E-01 | 5.01E-01 | -2.00E+00 | 1.63E+00 |
| Car7 | 1.92E+01 | 1.04E-03 | 1.87E-01 | 5.03E-01 | -1.99E+00 | 2.14E+00 |
| Fam83e | 9.01E+00 | 1.05E-02 | 2.90E-01 | 5.18E-01 | -1.93E+00 | 1.02E+00 |
| RP23-449F12 | 1.32E+01 | 2.88E-02 | 3.08E-01 | 5.21E-01 | -1.92E+00 | 1.50E+00 |
| AI506816 | 3.40E+02 | 1.45E-02 | 2.93E-01 | 5.22E-01 | -1.92E+00 | 3.88E+01 |
| Pgam2 | 1.11E+03 | 1.84E-02 | 3.01E-01 | 5.24E-01 | -1.91E+00 | 1.28E+02 |
| Teddm2 | 1.16E+01 | 7.69E-03 | 2.79E-01 | 5.24E-01 | -1.91E+00 | 1.33E+00 |

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|-------------|----------|----------|----------|----------|-----------|----------|
| Mylk2 | 1.62E+02 | 3.02E-02 | 3.10E-01 | 5.25E-01 | -1.91E+00 | 1.86E+01 |
| A930038B10f | 1.63E+01 | 2.99E-02 | 3.10E-01 | 5.25E-01 | -1.91E+00 | 1.87E+00 |
| Mas1 | 8.59E+00 | 2.25E-02 | 3.01E-01 | 5.32E-01 | -1.88E+00 | 9.94E-01 |
| Asb18 | 1.30E+01 | 6.02E-03 | 2.79E-01 | 5.33E-01 | -1.88E+00 | 1.51E+00 |
| Fbxl22 | 1.11E+02 | 7.78E-04 | 1.61E-01 | 5.33E-01 | -1.88E+00 | 1.28E+01 |
| Casq1 | 1.26E+03 | 9.73E-03 | 2.85E-01 | 5.38E-01 | -1.86E+00 | 1.47E+02 |
| Car14 | 7.54E+01 | 4.60E-03 | 2.71E-01 | 5.39E-01 | -1.85E+00 | 8.80E+00 |
| Cacng6 | 6.23E+01 | 6.99E-03 | 2.79E-01 | 5.40E-01 | -1.85E+00 | 7.28E+00 |
| Kcnk2 | 3.61E+01 | 3.66E-03 | 2.44E-01 | 5.41E-01 | -1.85E+00 | 4.23E+00 |
| Otud7a | 1.24E+01 | 1.15E-02 | 2.91E-01 | 5.42E-01 | -1.85E+00 | 1.45E+00 |
| Akap5 | 1.37E+01 | 8.11E-03 | 2.79E-01 | 5.45E-01 | -1.83E+00 | 1.61E+00 |
| Cmb1 | 6.04E+01 | 3.07E-02 | 3.11E-01 | 5.45E-01 | -1.83E+00 | 7.11E+00 |
| Gm16170 | 1.02E+01 | 2.29E-02 | 3.01E-01 | 5.51E-01 | -1.82E+00 | 1.21E+00 |
| Ccdc69 | 2.18E+01 | 1.69E-02 | 2.98E-01 | 5.51E-01 | -1.81E+00 | 2.58E+00 |
| Tmem233 | 4.53E+01 | 9.99E-03 | 2.86E-01 | 5.52E-01 | -1.81E+00 | 5.38E+00 |
| Tbx15 | 3.79E+02 | 2.49E-03 | 2.29E-01 | 5.53E-01 | -1.81E+00 | 4.50E+01 |
| Arhgap36 | 1.68E+03 | 3.17E-03 | 2.35E-01 | 5.53E-01 | -1.81E+00 | 1.99E+02 |
| Mpv17l | 3.94E+01 | 1.42E-02 | 2.93E-01 | 5.54E-01 | -1.80E+00 | 4.69E+00 |
| Lrp2bp | 2.63E+01 | 9.21E-03 | 2.79E-01 | 5.56E-01 | -1.80E+00 | 3.13E+00 |
| 6430571L13R | 3.09E+01 | 5.41E-03 | 2.79E-01 | 5.57E-01 | -1.79E+00 | 3.68E+00 |
| 4632404M16 | 2.93E+01 | 7.36E-04 | 1.61E-01 | 5.58E-01 | -1.79E+00 | 3.50E+00 |
| Gm26899 | 3.38E+01 | 7.88E-03 | 2.79E-01 | 5.58E-01 | -1.79E+00 | 4.03E+00 |
| Mlxipl | 1.31E+01 | 4.08E-02 | 3.17E-01 | 5.59E-01 | -1.79E+00 | 1.56E+00 |
| Klhl3 | 1.54E+01 | 5.77E-03 | 2.79E-01 | 5.60E-01 | -1.79E+00 | 1.84E+00 |
| Plcd4 | 2.66E+01 | 1.97E-02 | 3.01E-01 | 5.62E-01 | -1.78E+00 | 3.19E+00 |
| Atp1b2 | 3.11E+02 | 2.08E-02 | 3.01E-01 | 5.63E-01 | -1.78E+00 | 3.73E+01 |
| Il15ra | 9.53E+00 | 1.98E-02 | 3.01E-01 | 5.63E-01 | -1.77E+00 | 1.15E+00 |
| B3galt2 | 4.07E+01 | 4.14E-02 | 3.17E-01 | 5.65E-01 | -1.77E+00 | 4.89E+00 |
| Kcnk13 | 1.99E+01 | 3.67E-02 | 3.14E-01 | 5.66E-01 | -1.77E+00 | 2.40E+00 |
| Dnaic1 | 1.84E+01 | 2.28E-03 | 2.27E-01 | 5.67E-01 | -1.77E+00 | 2.22E+00 |
| Pgm2 | 5.76E+02 | 9.85E-03 | 2.86E-01 | 5.67E-01 | -1.76E+00 | 6.95E+01 |
| Gm15737 | 1.35E+01 | 3.68E-03 | 2.44E-01 | 5.67E-01 | -1.76E+00 | 1.63E+00 |
| Ddit4l | 5.95E+01 | 1.62E-03 | 2.04E-01 | 5.68E-01 | -1.76E+00 | 7.18E+00 |
| Ifit1 | 9.43E+00 | 3.39E-02 | 3.11E-01 | 5.69E-01 | -1.76E+00 | 1.14E+00 |
| Nkx2-5 | 1.34E+02 | 1.13E-02 | 2.90E-01 | 5.70E-01 | -1.76E+00 | 1.62E+01 |
| Dhrs7c | 2.20E+02 | 2.10E-02 | 3.01E-01 | 5.71E-01 | -1.75E+00 | 2.67E+01 |
| Sprr1b | 7.48E+01 | 3.43E-02 | 3.11E-01 | 5.72E-01 | -1.75E+00 | 9.07E+00 |
| 4833412C05f | 9.06E+00 | 6.18E-03 | 2.79E-01 | 5.74E-01 | -1.74E+00 | 1.10E+00 |
| Phka1 | 1.49E+02 | 4.49E-02 | 3.17E-01 | 5.74E-01 | -1.74E+00 | 1.82E+01 |
| Scn4b | 1.13E+01 | 2.54E-02 | 3.02E-01 | 5.78E-01 | -1.73E+00 | 1.38E+00 |
| 1810041L15R | 2.99E+02 | 1.44E-03 | 2.01E-01 | 5.80E-01 | -1.72E+00 | 3.66E+01 |
| Trim7 | 6.70E+01 | 3.26E-02 | 3.11E-01 | 5.81E-01 | -1.72E+00 | 8.20E+00 |
| Gatm | 1.24E+03 | 2.56E-02 | 3.02E-01 | 5.81E-01 | -1.72E+00 | 1.52E+02 |

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|-------------|----------|----------|----------|----------|-----------|----------|
| 2310002L09R | 1.45E+02 | 1.62E-02 | 2.97E-01 | 5.81E-01 | -1.72E+00 | 1.78E+01 |
| Pygm | 2.25E+03 | 1.80E-02 | 2.99E-01 | 5.83E-01 | -1.72E+00 | 2.76E+02 |
| Mlf1 | 5.91E+01 | 4.04E-02 | 3.17E-01 | 5.83E-01 | -1.71E+00 | 7.26E+00 |
| Kcnb2 | 7.44E+00 | 2.04E-02 | 3.01E-01 | 5.85E-01 | -1.71E+00 | 9.15E-01 |
| Gm10727 | 1.80E+01 | 2.35E-02 | 3.02E-01 | 5.85E-01 | -1.71E+00 | 2.21E+00 |
| Tgm2 | 6.90E+02 | 7.17E-04 | 1.60E-01 | 5.87E-01 | -1.70E+00 | 8.51E+01 |
| Gm37691 | 1.45E+01 | 6.25E-03 | 2.79E-01 | 5.87E-01 | -1.70E+00 | 1.79E+00 |
| Fsd2 | 2.19E+02 | 1.03E-03 | 1.87E-01 | 5.88E-01 | -1.70E+00 | 2.70E+01 |
| Rassf4 | 2.11E+02 | 3.21E-03 | 2.35E-01 | 5.91E-01 | -1.69E+00 | 2.62E+01 |
| Lingo3 | 1.86E+01 | 1.23E-02 | 2.91E-01 | 5.93E-01 | -1.69E+00 | 2.31E+00 |
| Gipr | 4.01E+01 | 3.43E-02 | 3.11E-01 | 5.95E-01 | -1.68E+00 | 4.99E+00 |
| Rprm | 9.33E+00 | 1.63E-02 | 2.97E-01 | 5.97E-01 | -1.68E+00 | 1.16E+00 |
| Rundc3a | 2.75E+01 | 3.52E-02 | 3.11E-01 | 5.97E-01 | -1.67E+00 | 3.43E+00 |
| Adora1 | 1.31E+02 | 5.42E-03 | 2.79E-01 | 5.98E-01 | -1.67E+00 | 1.64E+01 |
| Gpt2 | 1.94E+02 | 5.34E-03 | 2.79E-01 | 6.03E-01 | -1.66E+00 | 2.43E+01 |
| Irgm2 | 9.72E+01 | 6.11E-04 | 1.52E-01 | 6.04E-01 | -1.66E+00 | 1.22E+01 |
| Slc9a2 | 5.39E+01 | 3.16E-03 | 2.35E-01 | 6.05E-01 | -1.65E+00 | 6.78E+00 |
| Atp1b4 | 3.20E+03 | 1.53E-03 | 2.02E-01 | 6.06E-01 | -1.65E+00 | 4.02E+02 |
| Myocd | 9.43E+00 | 2.14E-02 | 3.01E-01 | 6.08E-01 | -1.65E+00 | 1.19E+00 |
| Fam131a | 2.86E+02 | 8.72E-03 | 2.79E-01 | 6.11E-01 | -1.64E+00 | 3.61E+01 |
| Serpinb3b | 3.34E+01 | 7.30E-03 | 2.79E-01 | 6.12E-01 | -1.64E+00 | 4.22E+00 |
| Cmya5 | 8.64E+02 | 1.42E-03 | 2.01E-01 | 6.12E-01 | -1.63E+00 | 1.09E+02 |
| Gm6088 | 4.90E+01 | 4.42E-02 | 3.17E-01 | 6.13E-01 | -1.63E+00 | 6.20E+00 |
| Popdc2 | 1.32E+02 | 1.50E-02 | 2.95E-01 | 6.14E-01 | -1.63E+00 | 1.68E+01 |
| Aldh1b1 | 2.10E+01 | 1.78E-03 | 2.10E-01 | 6.15E-01 | -1.63E+00 | 2.66E+00 |
| Sh3bgr | 1.75E+02 | 2.15E-02 | 3.01E-01 | 6.15E-01 | -1.63E+00 | 2.22E+01 |
| Erbp4 | 2.14E+01 | 3.58E-02 | 3.11E-01 | 6.16E-01 | -1.62E+00 | 2.72E+00 |
| Hrc | 7.15E+02 | 2.13E-03 | 2.15E-01 | 6.17E-01 | -1.62E+00 | 9.09E+01 |
| Wdfy1 | 1.72E+02 | 2.40E-02 | 3.02E-01 | 6.17E-01 | -1.62E+00 | 2.19E+01 |
| Ddo | 2.12E+01 | 1.22E-02 | 2.91E-01 | 6.18E-01 | -1.62E+00 | 2.70E+00 |
| Sh3kbp1 | 1.84E+02 | 3.66E-03 | 2.44E-01 | 6.19E-01 | -1.62E+00 | 2.35E+01 |
| Mlph | 1.83E+01 | 1.77E-02 | 2.99E-01 | 6.19E-01 | -1.61E+00 | 2.33E+00 |
| Srl | 3.77E+03 | 3.53E-03 | 2.43E-01 | 6.21E-01 | -1.61E+00 | 4.81E+02 |
| Gm13394 | 7.94E+02 | 4.41E-02 | 3.17E-01 | 6.21E-01 | -1.61E+00 | 1.01E+02 |
| Col2a1 | 1.91E+01 | 2.14E-02 | 3.01E-01 | 6.23E-01 | -1.61E+00 | 2.45E+00 |
| Cd300lg | 2.87E+01 | 4.78E-02 | 3.18E-01 | 6.25E-01 | -1.60E+00 | 3.68E+00 |
| Acot11 | 6.53E+01 | 6.29E-04 | 1.53E-01 | 6.25E-01 | -1.60E+00 | 8.37E+00 |
| Casq2 | 3.35E+03 | 5.38E-03 | 2.79E-01 | 6.25E-01 | -1.60E+00 | 4.30E+02 |
| Rabep2 | 1.05E+03 | 3.38E-02 | 3.11E-01 | 6.26E-01 | -1.60E+00 | 1.35E+02 |
| Eno3 | 2.92E+03 | 3.12E-02 | 3.11E-01 | 6.27E-01 | -1.60E+00 | 3.75E+02 |
| Prkaa2 | 2.30E+02 | 3.22E-03 | 2.35E-01 | 6.27E-01 | -1.60E+00 | 2.95E+01 |
| Gm9817 | 3.36E+02 | 2.19E-02 | 3.01E-01 | 6.27E-01 | -1.59E+00 | 4.32E+01 |
| Kcna7 | 2.06E+01 | 2.16E-02 | 3.01E-01 | 6.29E-01 | -1.59E+00 | 2.64E+00 |

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|-------------|----------|----------|----------|----------|-----------|----------|
| Lmcd1 | 3.63E+02 | 5.17E-03 | 2.79E-01 | 6.30E-01 | -1.59E+00 | 4.68E+01 |
| Irs1 | 3.21E+02 | 7.68E-04 | 1.61E-01 | 6.32E-01 | -1.58E+00 | 4.14E+01 |
| Pnpla3 | 3.79E+01 | 8.78E-03 | 2.79E-01 | 6.33E-01 | -1.58E+00 | 4.89E+00 |
| Cyp26b1 | 3.37E+02 | 7.95E-04 | 1.61E-01 | 6.33E-01 | -1.58E+00 | 4.35E+01 |
| Mafa | 3.91E+01 | 1.63E-02 | 2.97E-01 | 6.34E-01 | -1.58E+00 | 5.06E+00 |
| Adrbk2 | 1.84E+02 | 5.39E-03 | 2.79E-01 | 6.35E-01 | -1.57E+00 | 2.38E+01 |
| Ube2c | 3.32E+03 | 8.22E-03 | 2.79E-01 | 6.35E-01 | -1.57E+00 | 4.30E+02 |
| Sypl2 | 8.85E+02 | 7.85E-03 | 2.79E-01 | 6.37E-01 | -1.57E+00 | 1.15E+02 |
| Map3k7cl | 2.34E+02 | 3.15E-03 | 2.35E-01 | 6.37E-01 | -1.57E+00 | 3.04E+01 |
| Slc7a2 | 2.35E+02 | 2.57E-04 | 1.26E-01 | 6.41E-01 | -1.56E+00 | 3.06E+01 |
| Gm26885 | 1.14E+01 | 9.49E-03 | 2.83E-01 | 6.42E-01 | -1.56E+00 | 1.48E+00 |
| Atp2a3 | 7.83E+01 | 1.41E-03 | 2.01E-01 | 6.42E-01 | -1.56E+00 | 1.02E+01 |
| Esrrg | 2.17E+01 | 3.46E-02 | 3.11E-01 | 6.43E-01 | -1.56E+00 | 2.83E+00 |
| A930016O22 | 7.58E+02 | 2.71E-02 | 3.04E-01 | 6.47E-01 | -1.55E+00 | 9.93E+01 |
| Abra | 8.43E+01 | 1.08E-02 | 2.90E-01 | 6.49E-01 | -1.54E+00 | 1.11E+01 |
| Uckl1os | 1.65E+01 | 1.06E-02 | 2.90E-01 | 6.50E-01 | -1.54E+00 | 2.17E+00 |
| Trdn | 2.80E+02 | 1.03E-02 | 2.89E-01 | 6.53E-01 | -1.53E+00 | 3.68E+01 |
| Upk1b | 6.76E+01 | 1.94E-02 | 3.01E-01 | 6.53E-01 | -1.53E+00 | 8.90E+00 |
| 8430408G22I | 1.06E+02 | 9.85E-03 | 2.86E-01 | 6.54E-01 | -1.53E+00 | 1.39E+01 |
| Myh8 | 2.22E+04 | 2.93E-02 | 3.10E-01 | 6.55E-01 | -1.53E+00 | 2.93E+03 |
| Asb16 | 4.29E+01 | 8.93E-03 | 2.79E-01 | 6.57E-01 | -1.52E+00 | 5.67E+00 |
| Kcnc4 | 5.39E+01 | 8.77E-03 | 2.79E-01 | 6.57E-01 | -1.52E+00 | 7.13E+00 |
| Gm17281 | 1.28E+01 | 1.65E-02 | 2.97E-01 | 6.58E-01 | -1.52E+00 | 1.69E+00 |
| Stbd1 | 7.45E+02 | 3.63E-03 | 2.44E-01 | 6.58E-01 | -1.52E+00 | 9.86E+01 |
| Kcnn2 | 1.11E+01 | 2.94E-02 | 3.10E-01 | 6.59E-01 | -1.52E+00 | 1.47E+00 |
| Prune2 | 1.14E+02 | 1.48E-02 | 2.95E-01 | 6.59E-01 | -1.52E+00 | 1.52E+01 |
| Speg | 5.10E+02 | 7.86E-03 | 2.79E-01 | 6.60E-01 | -1.52E+00 | 6.76E+01 |
| Ryr2 | 6.56E+00 | 3.88E-02 | 3.17E-01 | 6.61E-01 | -1.51E+00 | 8.70E-01 |
| Reep1 | 3.44E+02 | 1.40E-02 | 2.93E-01 | 6.61E-01 | -1.51E+00 | 4.56E+01 |
| Plcl2 | 6.79E+01 | 1.36E-02 | 2.93E-01 | 6.61E-01 | -1.51E+00 | 9.01E+00 |
| A930003A15I | 2.84E+01 | 3.14E-02 | 3.11E-01 | 6.62E-01 | -1.51E+00 | 3.77E+00 |
| Igtp | 1.95E+02 | 8.84E-03 | 2.79E-01 | 6.62E-01 | -1.51E+00 | 2.58E+01 |
| Ankrd9 | 2.20E+02 | 2.55E-02 | 3.02E-01 | 6.63E-01 | -1.51E+00 | 2.92E+01 |
| Cacng1 | 5.54E+02 | 1.45E-02 | 2.93E-01 | 6.64E-01 | -1.51E+00 | 7.37E+01 |
| Synm | 1.08E+02 | 1.57E-03 | 2.02E-01 | 6.65E-01 | -1.50E+00 | 1.43E+01 |
| Zdbf2 | 1.29E+03 | 8.92E-03 | 2.79E-01 | 6.65E-01 | -1.50E+00 | 1.72E+02 |
| Grik3 | 3.25E+01 | 3.20E-02 | 3.11E-01 | 6.66E-01 | -1.50E+00 | 4.32E+00 |
| Baiap2l2 | 1.20E+01 | 4.09E-02 | 3.17E-01 | 6.66E-01 | -1.50E+00 | 1.60E+00 |
| Mustn1 | 2.13E+02 | 1.54E-02 | 2.95E-01 | 6.67E-01 | -1.50E+00 | 2.84E+01 |
| Camk2a | 3.79E+02 | 1.10E-02 | 2.90E-01 | 6.68E-01 | -1.50E+00 | 5.06E+01 |

-, (P<=0.05 1.5 Folds change)

LSMean(WT) (mutant vs. WT)

4.67E+00

1.32E+00

8.43E-01

1.44E+00

1.36E+00

4.59E-01

1.42E+02

9.50E-01

3.26E+00

1.60E+00

1.37E+01

1.28E+00

1.63E+00

8.68E-01

9.60E+00

7.06E-01

1.26E+01

1.45E+00

1.53E+00

3.20E+00

2.07E+00

1.30E+00

9.98E+00

6.09E+00

1.04E+00

1.40E+00

3.32E+00

1.72E+00

6.86E-01

4.42E+00

2.71E+00

2.22E+00

3.70E+00

7.75E+00

2.45E+00

9.28E+00

6.96E+00

1.45E+00

2.53E+00
2.25E+01
3.36E+00
1.36E+00
5.21E+00
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1.58E+00
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LSMean(WT) (mutant vs. WT)

5.77E+00
1.31E+01
5.08E+00
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