

A

| Gene Symbol | RE1 | Probe ID | Rest-/- vs. WT | | shREST vs. shCtrl | |
|---------------|-----|--------------|----------------|---------|-------------------|---------|
| | | | FC | p-value | FC | p-value |
| 1200015N20Rik | | 1437062_s_at | 2.99 | 5E-05 | 3.11 | 4E-06 |
| 1500016G10Rik | | 1452807_s_at | 1.80 | 4E-02 | 1.62 | 2E-03 |
| 2600009P04Rik | | 1435871_at | 1.80 | 2E-04 | 2.16 | 2E-04 |
| 2610024G14Rik | | 1418222_at | 2.32 | 6E-06 | 1.70 | 4E-04 |
| 3632451O06Rik | | 1450770_at | 2.01 | 5E-04 | 1.57 | 1E-02 |
| 6330407J23Rik | | 1429628_at | 2.79 | 2E-04 | 2.74 | 1E-04 |
| Abcb6 | | 1422524_at | 2.34 | 1E-05 | 1.44 | 3E-03 |
| Acsl6 | X | 1451257_at | 2.46 | 7E-05 | 1.60 | 8E-03 |
| AU040320 | | 1452150_at | 2.12 | 6E-05 | 1.58 | 9E-03 |
| Bex2 | X | 1417388_at | 2.07 | 7E-03 | 2.34 | 1E-05 |
| Bruno14 | | 1452240_at | 1.61 | 3E-04 | 1.46 | 2E-02 |
| Car3 | X | 1449434_at | 2.87 | 3E-03 | 5.37 | 4E-05 |
| Ccdc64 | | 1426816_at | 1.75 | 1E-04 | 1.89 | 1E-04 |
| Cdk5r1 | | 1433451_at | 1.74 | 4E-04 | 1.50 | 6E-03 |
| Celsr3 | X | 1425067_at | 5.70 | 2E-07 | 4.29 | 8E-07 |
| Chga | | 1418149_at | 6.95 | 1E-08 | 2.75 | 2E-05 |
| Chmb2 | X | 1436428_at | 2.79 | 6E-06 | 1.46 | 9E-03 |
| Ckmt1 | | 1417089_a_at | 3.29 | 2E-05 | 2.27 | 7E-04 |
| | | 1432418_a_at | 2.84 | 7E-04 | 2.08 | 5E-03 |
| Cplx1 | X | 1417746_at | 3.52 | 3E-06 | 2.05 | 1E-04 |
| Crip2 | X | 1417311_at | 1.71 | 3E-04 | 1.72 | 2E-04 |
| Crmp1 | | 1448289_at | 1.70 | 5E-02 | 2.46 | 4E-05 |
| Cyr61 | | 1457823_at | 1.45 | 8E-03 | 1.46 | 5E-02 |
| Dpp4 | | 1416697_at | 0.63 | 7E-03 | 0.52 | 8E-03 |
| Dppa3 | | 1424295_at | 2.25 | 3E-03 | 1.90 | 2E-03 |
| E130309D14Rik | | 1433673_at | 2.28 | 1E-04 | 1.63 | 7E-03 |
| Elavl3 | | 1452524_a_at | 1.42 | 3E-02 | 1.45 | 6E-03 |
| Elov12 | | 1416444_at | 3.86 | 7E-06 | 3.02 | 8E-06 |
| Epas1 | | 1435436_at | 1.54 | 3E-03 | 1.47 | 2E-02 |
| Epha4 | | 1429021_at | 0.19 | 1E-07 | 0.59 | 3E-03 |
| Exoc31 | | 1436536_at | 2.74 | 9E-06 | 1.65 | 3E-02 |
| Galnt9 | | 1434055_at | 2.86 | 1E-06 | 2.40 | 8E-05 |
| Gdap1 | X | 1423328_at | 7.66 | 8E-07 | 3.67 | 3E-05 |
| Gdap111 | X | 1424935_at | 2.08 | 1E-03 | 1.51 | 4E-03 |
| Gm50 | | 1455202_at | 1.45 | 2E-03 | 1.49 | 9E-03 |
| Gmptg | X | 1436526_at | 4.04 | 8E-06 | 2.16 | 6E-05 |
| Gps2 | | 1417796_at | 1.75 | 1E-03 | 1.66 | 8E-04 |
| Hagh | | 1424171_a_at | 1.43 | 3E-03 | 1.43 | 4E-03 |
| Hcn3 | X | 1451023_at | 1.96 | 2E-04 | 1.72 | 6E-04 |
| Igfbp3 | | 1423062_at | 1.66 | 6E-03 | 1.63 | 4E-04 |
| Ina | | 1448991_a_at | 2.09 | 3E-03 | 2.37 | 8E-04 |
| Kenb1 | | 1423179_at | 1.46 | 5E-03 | 1.63 | 6E-04 |
| Ldoc1 | | 1435815_at | 1.67 | 3E-02 | 1.43 | 7E-03 |
| Letmd1 | | 1418860_a_at | 2.01 | 3E-04 | 1.89 | 1E-02 |
| LOC100039489 | | 1433507_a_at | 1.56 | 5E-04 | 1.44 | 3E-03 |
| Madd | | 1455502_at | 1.45 | 8E-03 | 1.55 | 8E-04 |
| Mapk11 | X | 1421926_at | 1.56 | 3E-03 | 1.57 | 5E-03 |
| Mapk8ip2 | X | 1449225_a_at | 1.83 | 7E-03 | 1.96 | 8E-05 |
| March11 | X | 1455947_at | 1.86 | 4E-04 | 1.43 | 1E-02 |
| Mterfd3 | | 1455700_at | 1.51 | 2E-03 | 1.49 | 3E-03 |
| Nefh | | 1424847_at | 1.58 | 2E-02 | 1.73 | 1E-02 |
| Nefl | | 1426255_at | 1.61 | 2E-02 | 2.02 | 3E-03 |
| Neurod1 | X | 1426413_at | 1.67 | 5E-02 | 1.60 | 2E-02 |
| | X | 1426412_at | 1.51 | 2E-02 | 1.63 | 2E-02 |
| Obfc2b | | 1451291_at | 1.77 | 3E-04 | 1.60 | 8E-04 |
| Pank1 | | 1431028_a_at | 0.63 | 5E-03 | 0.68 | 3E-03 |
| Pclo | | 1419392_at | 2.20 | 6E-03 | 1.60 | 3E-03 |
| Phf21b | | 1454999_at | 2.02 | 3E-05 | 1.64 | 6E-03 |
| Phyhlpl | | 1427023_at | 2.29 | 2E-04 | 2.34 | 2E-05 |
| Pias3 | | 1451115_at | 1.63 | 2E-04 | 1.42 | 9E-03 |
| Rab28 | | 1423990_at | 1.62 | 2E-04 | 1.74 | 1E-04 |
| Rab39 | | 1437762_at | 3.07 | 4E-06 | 2.80 | 3E-05 |
| Rab3c | | 1432432_a_at | 2.26 | 5E-04 | 1.87 | 2E-03 |
| Rel2 | | 1434147_at | 1.79 | 2E-03 | 1.86 | 4E-03 |
| Rgs17 | | 1450693_at | 1.58 | 2E-02 | 1.64 | 4E-04 |
| Rhbdf1 | X | 1424138_at | 1.61 | 2E-03 | 1.71 | 1E-03 |
| Rims2 | | 1450761_s_at | 1.57 | 4E-04 | 1.56 | 3E-02 |
| | | 1422809_at | 1.55 | 2E-03 | 1.89 | 1E-02 |
| Rtn2 | X | 1419056_at | 1.78 | 3E-03 | 1.99 | 9E-04 |
| Rundc3a | X | 1449246_at | 2.19 | 5E-06 | 1.52 | 8E-04 |
| | X | 1436674_at | 1.50 | 3E-03 | 1.85 | 2E-04 |
| Scap | | 1433520_at | 1.50 | 1E-03 | 1.49 | 2E-03 |
| Scg3 | X | 1448628_at | 18.68 | 3E-08 | 4.57 | 4E-07 |
| Scg5 | | 1423150_at | 6.28 | 4E-07 | 2.81 | 6E-06 |
| Scn3b | X | 1435767_at | 2.26 | 3E-04 | 2.72 | 4E-05 |
| Sgcb | | 1419668_at | 3.08 | 8E-07 | 1.75 | 2E-03 |
| Sirt7 | | 1424238_at | 1.61 | 1E-03 | 1.66 | 4E-04 |
| Slc40a1 | | 1417061_at | 1.95 | 2E-03 | 2.04 | 1E-04 |
| Smpd3 | | 1438665_at | 1.45 | 2E-02 | 1.71 | 3E-04 |
| Snap25 | | 1416828_at | 9.54 | 3E-09 | 1.71 | 8E-04 |
| Snx1 | | 1416260_a_at | 2.37 | 1E-05 | 1.98 | 2E-05 |
| Stmn3 | X | 1460181_at | 6.26 | 5E-07 | 4.65 | 3E-06 |
| | X | 1435113_x_at | 6.26 | 2E-07 | 5.04 | 5E-07 |
| Stx1a | | 1437390_x_at | 1.61 | 8E-03 | 1.51 | 2E-02 |
| Syp | X | 1448280_at | 4.23 | 1E-05 | 3.27 | 2E-05 |
| Syt4 | X | 1415845_at | 1.75 | 7E-05 | 1.46 | 2E-03 |
| Tcerg11 | | 1431835_at | 1.97 | 2E-03 | 1.56 | 2E-03 |
| | | 1457133_at | 1.75 | 2E-03 | 1.68 | 2E-04 |
| Tmhs | X | 1429266_at | 2.79 | 5E-05 | 1.96 | 3E-04 |
| Tob2 | | 1448666_s_at | 1.49 | 2E-03 | 2.01 | 5E-04 |
| Ttc9b | | 1429416_at | 1.80 | 7E-04 | 2.33 | 1E-05 |
| Unc13a | X | 1437472_at | 4.02 | 8E-07 | 3.63 | 1E-05 |
| Vgf | | 1436094_at | 14.23 | 2E-06 | 3.52 | 1E-06 |

B

| Category | Term | RT | Genes | Count | % | P-Value | Bonferroni |
|-----------|----------------|----|-------|-------|------|---------|------------|
| UP_TISSUE | Brain | | | 38 | 43.7 | 5.6E-5 | 2.4E-2 |
| UP_TISSUE | Hippocampus | | | 12 | 13.8 | 1.2E-4 | 4.9E-2 |
| UP_TISSUE | Cerebellum | | | 17 | 19.5 | 2.7E-4 | 1.1E-1 |
| UP_TISSUE | Eye | | | 15 | 17.2 | 5.1E-4 | 1.9E-1 |
| UP_TISSUE | Brain cortex | | | 9 | 10.3 | 9.5E-4 | 3.3E-1 |
| UP_TISSUE | Retina | | | 9 | 10.3 | 2.6E-3 | 6.7E-1 |
| UP_TISSUE | Olfactory bulb | | | 4 | 4.6 | 1.7E-2 | 1.0E0 |
| UP_TISSUE | Spinal cord | | | 7 | 8.0 | 1.7E-2 | 1.0E0 |