

**Supplemental Table S7. Top TSGs upregulated in response to NTX-301.**

| hgnc_symbol   | ensembl_gene_id | Mean     | log2 Fold Change | lfcSE    | padj            | deltaB  | feature     | adjP    |
|---------------|-----------------|----------|------------------|----------|-----------------|---------|-------------|---------|
| NKX2-5        | ENSG00000183072 | 11.58002 | 6.90503          | 1.309919 | 4.75E-07        | -0.0315 | 3'UTR       | 0.02480 |
|               |                 |          |                  |          |                 | -0.0337 | Body        | 0.04962 |
|               |                 |          |                  |          |                 | -0.0238 | Body        | 0.05615 |
| CDH13         | ENSG00000140945 | 8.478616 | 5.464011         | 1.349538 | 0.000140        | 0.04702 | Body        | 0.01870 |
| BTG4          | ENSG00000137707 | 7.050220 | 6.188869<br>33   | 1.386308 | 2.40E-05        | 0.09694 | Body        | 0.01870 |
| PALM3         | ENSG00000187867 | 6.454060 | 6.060376         | 1.418879 | 5.57E-05        |         |             |         |
| ADAMTS<br>1   | ENSG00000151388 | 11.63216 | 5.925397         | 1.305975 | 1.73E-05        | -0.082  | Body        | 0.04930 |
|               |                 |          |                  |          |                 | 0.07665 | Body        | 0.03264 |
|               |                 |          |                  |          |                 | -0.1109 | Body        | 0.0063  |
| PDCD1         | ENSG00000197646 | 19.14290 | 4.734521         | 0.856670 | 1.20E-07        | -0.045  | TSS20<br>0  | 0.0201  |
|               |                 |          |                  |          |                 | -0.0860 | TSS20<br>0  | 0.02646 |
| ABI3          | ENSG00000108798 | 94.95796 | 4.319768         | 0.346786 | 1.69E-34        | -0.0720 | TSS20<br>0  | 0.02028 |
| MKRN3         | ENSG00000179455 | 3.934684 | 4.314649         | 1.536909 | 0.010275        |         |             |         |
| BCL6B         | ENSG00000161940 | 7.101923 | 4.264200         | 1.248176 | 0.001501        |         |             |         |
| HHIP          | ENSG00000164161 | 28.35636 | 3.93851          | 0.603850 | 3.07E-10        | -0.0549 | Body        | 0.0217  |
|               |                 |          |                  |          |                 | -0.0777 | TSS15<br>00 | 0.0089  |
| LHX6          | ENSG00000106852 | 40.36699 | 3.824522         | 0.492978 | 4.83E-14        | 0.04872 | Body        | 0.0226  |
| KISS1         | ENSG00000170498 | 273.7971 | 3.772552         | 0.188769 | 3.42E-87        |         |             |         |
| S100A2        | ENSG00000196754 | 142.4601 | 3.584474         | 0.247052 | 1.98E-46        | 0.04597 | Body        | 0.0336  |
|               |                 |          |                  |          |                 | 0.05375 | Body        | 0.0403  |
|               |                 |          |                  |          |                 | 0.07854 | 3'UTR       | 0.0551  |
| ROBO4         | ENSG00000154133 | 136.892  | 3.401264         | 0.243401 | 3.82E-43        | 0.08667 | ExonB<br>nd | 0.0468  |
|               |                 |          |                  |          |                 | -0.0482 | 1stExo<br>n | 0.0151  |
| RASD1         | ENSG00000108551 | 15.03228 | 3.101970         | 0.688225 | 1.98E-05        | 0.05009 | 3'UTR       | 0.0493  |
| FST           | ENSG00000134363 | 75.25256 | 3.040806         | 0.315240 | 4.06E-21        |         |             |         |
| CEACAM<br>P10 | ENSG00000241104 | 12.05770 | 2.91413          | 0.799845 | 0.000671        |         |             |         |
|               |                 |          |                  |          |                 | 0.12206 | 5'UTR       | 0.00309 |
| ST18          | ENSG00000147488 | 5.567604 | 2.799130         | 1.095387 | 0.020549<br>731 | -0.0667 | 5'UTR       | 0.01898 |
| APCDD1L       | ENSG00000198768 | 41.44353 | 2.792958         | 0.39862  | 1.19E-11        | -0.0523 | Body        | 0.02286 |

Supplemental Material

|           |                 |          |          |          |           |         |         |         |
|-----------|-----------------|----------|----------|----------|-----------|---------|---------|---------|
|           |                 |          |          |          |           | -0.0331 | Body    | 0.03127 |
| GOS2      | ENSG00000082074 | 9.697640 | 2.792412 | 0.81456  | 0.00144   |         |         |         |
| SERPINB5  | ENSG00000206075 | 138.8239 | 2.779696 | 0.216292 | 1.19E-36  |         |         |         |
| CDKN1A    | ENSG00000124762 | 728.6218 | 2.702802 | 0.100737 | 1.92E-156 |         |         |         |
|           |                 |          |          |          |           | -0.1446 | 5'UTR   | 0.02490 |
| MTPP      | ENSG00000138823 | 12.39016 | 2.616961 | 0.70065  | 0.000479  | -0.1275 | 5'UTR   | 0.06225 |
| NEIL3     | ENSG00000109674 | 193.3088 | 2.466928 | 0.180079 | 1.67E-41  |         |         |         |
|           |                 |          |          |          |           | 0.05870 | Body    | 0.01983 |
|           |                 |          |          |          |           | 0.06497 | 3'UTR   | 0.03695 |
| LAMB3     | ENSG00000196878 | 970.6115 | 2.399266 | 0.086140 | 1.61E-168 | 0.09160 | TSS1500 | 0.04862 |
|           |                 | 300.9855 | 2.337544 |          |           | 0.06786 | 5'UTR   | 0.05859 |
| ATF3      | ENSG00000162772 | 919      | 348      | 0.148094 | 9.17E-55  | -0.0261 | 5'UTR   | 0.03643 |
|           |                 |          |          |          |           | -0.1183 | Body    | 0.05595 |
| TRIM36    | ENSG00000152503 | 76.96529 | 2.30547  | 0.277174 | 5.60E-16  | -0.0819 | TSS1500 | 0.05176 |
| MIR34AHG  | ENSG00000228526 | 30.94386 | 2.292208 | 0.43226  | 4.03E-07  |         |         |         |
| CDH15     | ENSG00000129910 | 73.56554 | 2.223569 | 0.293387 | 1.89E-13  | 0.04738 | Body    | 0.04904 |
| INKA2-AS1 | ENSG00000227811 | 44.30223 | 2.214687 | 0.36705  | 6.51E-09  |         |         |         |
| NR5A1     | ENSG00000136931 | 8.823207 | 2.186883 | 0.791360 | 0.011635  | 0.03018 | 1stExon | 0.04027 |
| SOX18     | ENSG00000203883 | 82.45775 | 2.183645 | 0.267451 | 1.95E-15  |         |         |         |
| MSX1      | ENSG00000163132 | 743.0822 | 2.168909 | 0.092529 | 1.29E-119 |         |         |         |
| DOC2B     | ENSG00000272636 | 79.0372  | 2.11577  | 0.26532  | 8.93E-15  | -0.0454 | Body    | 0.05751 |
|           |                 |          |          |          |           | -0.0673 | Body    | 0.01773 |
| CACNA1G   | ENSG00000006283 | 105.0117 | 2.076418 | 0.236289 | 1.04E-17  | -0.0248 | Body    | 0.0556  |
|           |                 |          |          | 0.481346 |           |         |         |         |
| DACT1     | ENSG00000165617 | 23.2005  | 2.042175 | 214      | 6.28E-05  | -0.1181 | 3'UTR   | 0.01754 |