

Table S3

| RefSeq | Gene name | Gene title | CPu-Morphine/Vehicle | | | CPu-Vehicle/VU0155041 | | | CPu-Morphine/VU0155041 | | | NAc-Morphine/Vehicle | | | NAc-Vehicle/VU0155041 | | | NAc-Morphine/VU0155041 | | | CeA-Morphine/Vehicle | | | CeA-Vehicle/VU0155041 | | | | | |
|--------------|---|---------------|----------------------|------|--------------------|-----------------------|------|--------------------|------------------------|------|--------------------|----------------------|------|--------------------|-----------------------|------|--------------------|------------------------|------|--------------------|----------------------|------|--------------------|-----------------------|------|--------------------|-------|------|-------|
| | | | FC | sem | Corrected p values | FC | sem | Corrected p values | FC | sem | Corrected p values | FC | sem | Corrected p values | FC | sem | Corrected p values | FC | sem | Corrected p values | FC | sem | Corrected p values | FC | sem | Corrected p values | | | |
| NM_028755 | cyclic AMP-regulated phosphoprotein, 21 | <i>Arp21</i> | -1.05 | 0.29 | 0.937 | 1.82 | 0.17 | 0.006 | 1.89 | 0.22 | 0.053 | -1.52 | 0.23 | 0.085 | 1.20 | 0.15 | 0.241 | 1.36 | 0.06 | 0.019 | -1.44 | 0.29 | 0.324 | -1.05 | 0.19 | 0.842 | 1.08 | 0.18 | 0.696 |
| NM_009732 | arginine vasopressin | <i>Avp</i> | -1.75 | 0.43 | 0.298 | 1.36 | 0.43 | 0.676 | 1.79 | 0.35 | 0.025 | -2.44 | 0.43 | 0.042 | -1.05 | 0.42 | 0.908 | 1.25 | 0.47 | 0.879 | -1.11 | 0.40 | 0.460 | -1.30 | 0.30 | 0.421 | 1.40 | 0.32 | 0.432 |
| NM_007540 | brain derived neurotrophic factor | <i>Bdnf</i> | -1.76 | 0.42 | 0.241 | -1.08 | 0.40 | 0.838 | -1.11 | 0.59 | 0.162 | -1.93 | 0.41 | 0.139 | 8.16 | 3.20 | 0.185 | 3.23 | 1.41 | 0.302 | 1.66 | 0.07 | 0.031 | 1.39 | 0.19 | 0.241 | 1.79 | 0.27 | 0.048 |
| NM_010076 | dopamine receptor D1A | <i>Drd1a</i> | -1.24 | 0.21 | 0.580 | 1.28 | 0.17 | 0.707 | 1.72 | 0.22 | 0.039 | -1.60 | 0.19 | 0.041 | 1.10 | 0.13 | 0.831 | -1.23 | 0.29 | 0.928 | -1.35 | 0.25 | 0.233 | -1.91 | 0.32 | 0.050 | -1.32 | 0.32 | 0.424 |
| NM_010077 | dopamine receptor D2 | <i>Drd2</i> | -1.59 | 0.66 | 0.735 | -1.28 | 0.22 | 0.336 | -1.03 | 0.39 | 0.271 | -1.09 | 0.11 | 0.757 | 1.29 | 0.31 | 0.931 | -1.09 | 0.28 | 0.878 | -1.69 | 0.18 | 0.029 | -1.63 | 0.46 | 0.832 | -3.13 | 0.89 | 0.089 |
| NM_010234 | FBJ osteosarcoma oncogene | <i>Fos</i> | -1.09 | 0.15 | 0.750 | 1.03 | 0.33 | 0.911 | 1.21 | 0.26 | 0.029 | -1.53 | 0.20 | 0.047 | 1.21 | 0.25 | 0.866 | -1.10 | 0.26 | 0.801 | 1.23 | 0.15 | 0.362 | 1.19 | 0.13 | 0.553 | 1.47 | 0.26 | 0.781 |
| NM_001013385 | glutamate receptor, metabotropic 4 | <i>Grm4</i> | -1.29 | 0.36 | 0.196 | 1.63 | 0.44 | 0.426 | 1.79 | 0.40 | 0.039 | -1.43 | 0.30 | 0.182 | 1.63 | 0.44 | 0.177 | 2.10 | 0.50 | 0.018 | 1.02 | 0.29 | 0.717 | 1.61 | 0.25 | 0.049 | -1.28 | 0.32 | 0.848 |
| NM_010471 | hippocalcin | <i>Hpcn</i> | 1.12 | 0.28 | 0.843 | 1.47 | 0.23 | 0.047 | 2.12 | 0.38 | 0.036 | -1.85 | 0.31 | 0.043 | -1.02 | 0.11 | 0.256 | 1.12 | 0.19 | 0.889 | -1.58 | 0.39 | 0.736 | -1.26 | 0.20 | 0.416 | -1.07 | 0.19 | 0.732 |
| NM_010444 | nuclear receptor subfamily 4, group A, member 1 | <i>Nr4a1</i> | -2.24 | 0.51 | 0.460 | -1.05 | 0.32 | 0.777 | 1.21 | 0.27 | 0.085 | -1.24 | 0.31 | 0.363 | -1.08 | 0.52 | 0.730 | 1.23 | 0.28 | 0.981 | 1.05 | 0.23 | 0.901 | 1.40 | 0.16 | 0.050 | 1.13 | 0.17 | 0.571 |
| NM_011025 | oxytocin | <i>Oxt</i> | -1.22 | 0.35 | 0.730 | 2.20 | 0.60 | 0.198 | 1.94 | 0.42 | 0.042 | -2.07 | 0.45 | 0.047 | 1.03 | 0.28 | 0.336 | 3.52 | 0.99 | 0.146 | -2.53 | 0.55 | 0.056 | -1.36 | 0.26 | 0.689 | -1.66 | 0.70 | 0.581 |
| NM_011866 | phosphodiesterase 10A | <i>Pde10a</i> | -1.43 | 0.20 | 0.751 | -1.00 | 0.34 | 0.656 | 1.33 | 0.36 | 0.394 | -1.24 | 0.23 | 0.230 | -1.04 | 0.13 | 0.627 | -1.24 | 0.37 | 0.541 | -2.60 | 0.65 | 0.031 | -1.81 | 0.63 | 0.682 | -3.27 | 1.22 | 0.132 |
| NM_009305 | Synaptophysin | <i>Syp</i> | -1.07 | 0.41 | 0.861 | 6.63 | 1.46 | 0.010 | 6.68 | 1.19 | 0.029 | -2.00 | 0.57 | 0.220 | 4.10 | 0.74 | 0.006 | 2.57 | 0.25 | 0.003 | 1.12 | 0.55 | 0.189 | 1.29 | 0.24 | 0.472 | 4.20 | 1.20 | 0.049 |