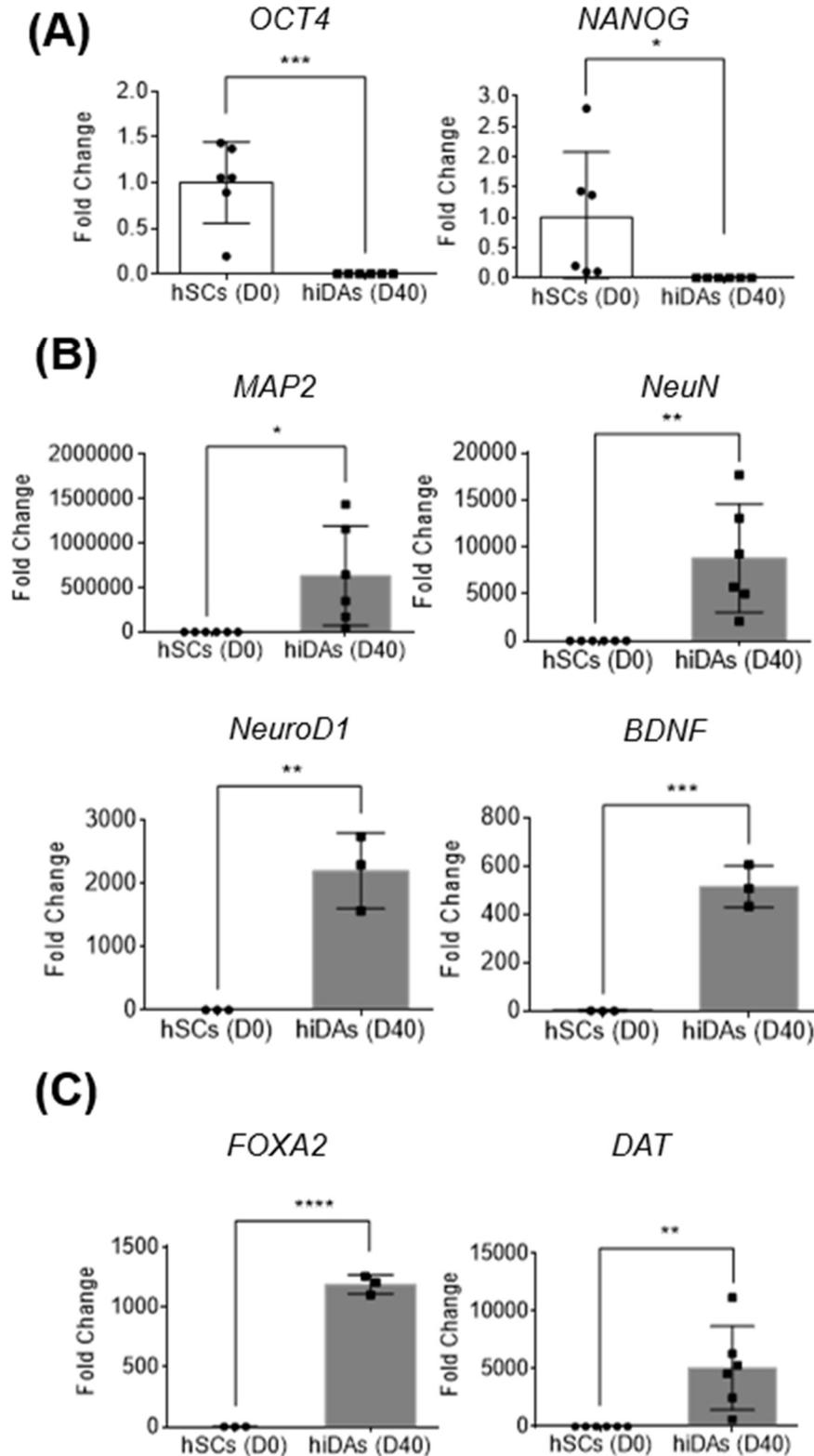
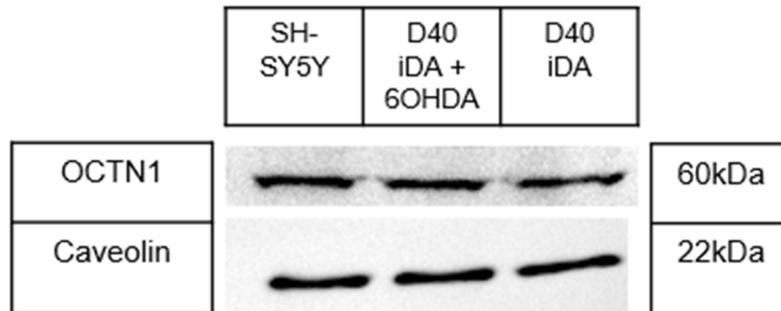


Supplementary Materials



Supplementary Figure S1. qPCR quality control of day 40 dopaminergic neurons. (A) RT-qPCR analysis of relative mRNA expression of stem cell markers *OCT4* and *NANOG*. (B) RT-qPCR analysis of relative mRNA expression of neuronal markers *MAP2*, *NeuN*, *NeuroD1* and *BDNF*. (C) RT-qPCR analysis of relative mRNA expression of dopaminergic neuron-specific markers *FOXA2* and *DAT*. (A–C) Data is represented as

mean \pm SD ($n \geq 3$). Data was analyzed by unpaired student's t-test. Data was analyzed by unpaired student's t-test. * $p \leq 0.05$. ** $p \leq 0.01$. *** $p \leq 0.001$. **** $p \leq 0.0001$.



Supplementary Figure S2. Western blot showing expression of OCTN1 in SH-SY5Y, D40 iDA and 6OHDA treated D40 iDA lysates, respectively. Images are representative of three independent experiments ($n = 3$).

Supplementary Table S1. Primer sequences used for RT-qPCR.

| S/N | Primers (<i>Homo Sapiens</i>) | Gene accession number | Sequences (5' to 3') |
|-----|---------------------------------|-----------------------|---|
| 1 | <i>GAPDH</i> | NM_002046 | Forward: GCAAATTCATGGCACCGT Reverse: GCCCCACTTGATTTGGAGG |
| 2 | <i>ACTB</i> | NM_001101 | Forward: AGATGAGATTGGCATGGCTTTA Reverse: GGACTTCCTGTAACAACGCATC |
| 3 | <i>OCT4</i> | NM_002701 | Forward: CCTGAAGCAGAAGAGGATCACC Reverse: AAAGCGGCAGATGGTCGTTGG |
| 4 | <i>NANOG</i> | NM_024865 | Forward: CTCCAACATCCTGAACCTCAGC Reverse: CGTCACACCATTGCTATTCTCG |
| 5 | <i>MAP2</i> | NM_002374 | Forward: AGGCTGTAGCAGTCCTGAAAGG Reverse: CTTCCTCCACTGTGACAGTCTG |
| 6 | <i>NeuN</i> | NM_001082575 | Forward: TACGCAGCCTACAGATACGCTC Reverse: TGGTTCCAATGCTGTAGGTCGC |
| 7 | <i>NeuroD1</i> | NM_002500 | Forward: GGTGCCTTGCTATTCTAAGACGC Reverse: GCAAAGCGTCTGAACGAAGGAG |
| 8 | <i>BDNF</i> | NM_170734 | Forward: CATCCGAGGACAAGGTGGCTTG Reverse: GCCGAACCTTCTGGTCCTCATC |
| 9 | <i>FOXA2</i> | NM_021784 | Forward: GGAACACCACTACGCCTTCAAC Reverse: AGTGCATCACCTGTCGTAGGC |
| 10 | <i>DAT</i> | NM_001044 | Forward: CCTCAACGACACTTTGGGACC Reverse: AGTAGAGCAGCACGATGACCAG |