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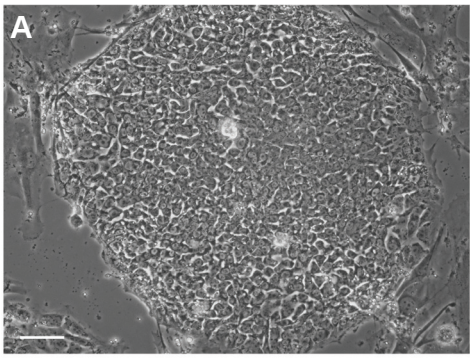
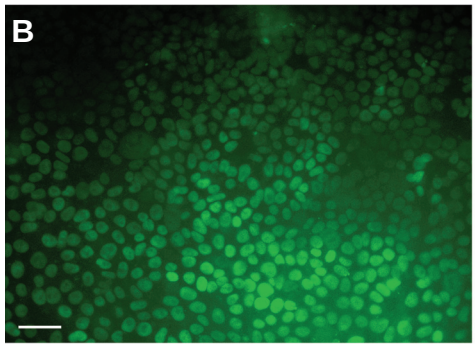
SUPPLEMENTARY MATERIAL

corresponding to:

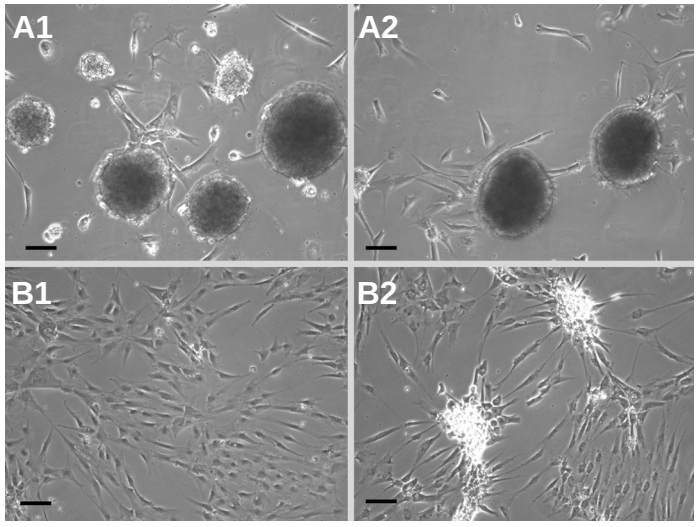
Increased cellular turnover in response to fluoxetine in neuronal precursors derived from human embryonic stem cells

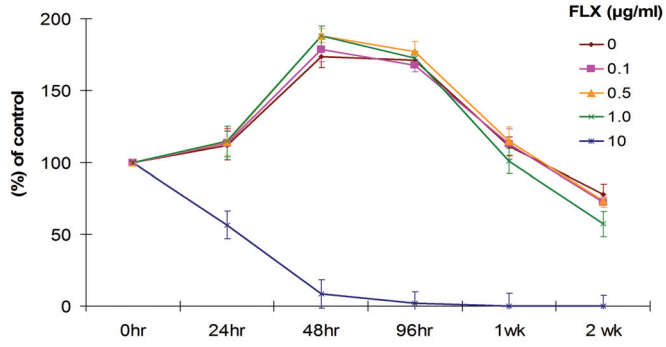




Supp. Fig. 1 (Left). Human embryonic stem cells (hESC, H9, p29) grown on mouse embryonic fibroblasts. (A) *hESC colony morphology on day 7.* **(B)** *Oct4-positive immunostaining of hESC colony (scale bar, 50 μm)..*

Supp. Fig. 2 (Right). Chromosomal analysis of hESC-derived neuronal precursors (NPs). *NPs showed a normal karyotype (46, XX).*





Sup. Fig. 3 (Left). Morphology of neuronal precursors after 2 weeks with (A) and without (B) FGF-2. *Neuronal precursors cultured with FGF-2 show similar morphology.* **(A1)** *Cells grown without FLX (FLX-/FGF-2+);* **(A2)** *cells grown with 0.5 μg/ml FLX(FLX+/FGF-2+).* **(B1)** *Cells cultured without FLX (FLX-/FGF-2-) differentiated and grew up into a single cell type.* **(B2)** *Cells treated with FLX (0.5 μg/ml) grew forming neurospheres-like aggregates (FLX+/FGF-2-). Scale bar, 50 μm.*

Sup. Fig. 4 (Right). Cell proliferation rates according to fluoxetine (FLX) concentration and time course with MTT assay. *Half of the cells died within 24 hours with10 μg/ml of FLX. NPs survived 1 week at 1 μg/ml FLX. During week 2, no difference in cell proliferation was seen between control cells and those with 0.5 μg/ml.*

SUPPLEMENTARY TABLE 1

SEMIQUANTITATIVE RT-PCR PRIMER DETAILS FOR TARGET GENES

Gene	Accession number	Sequence	Product size (bp)
Nestin	NT_004487	5′-CAG CGT TGG AAC AGA GGT TGG 3′-TGG CAC AGG TGT CTC AAG GGT AG	388
β -tubulin	NT_024000	5′- GAT GAG CAC GGC ATC GAC 3′- GCC TCC TTT CTC ACA ACA TC	296
MAP2	NT_005403	5′- CCA ATG GAT TCC CAT ACA GG 3′- CTG TTC TGA GGC AGG TGA TG	302
NF-H	NT_011520	5′- TGA ACA CAG ACG CTA TGC GCT CAG 3′- CAC CTT TAT GTG AGT GGA CAC AGA G	400
GFAP	NT_010783	5′- GCT CGA TCA ACT CAC CGC CAA CA 3′- GGG CAG CAG CGT CTG TCA GGT C	430
Olig2	NT_011512	5′- GAC AAG CTA GGA GGC AGT GG 3′- CAC CAG TCG CTT CAT CTC CT	317
β-Actin	NT_032977	5′- GGA GCA ATG ATC TTG ATC TT 3′- CCT TCC TGG GCA TGG AGT CCT	459

SUPPLEMENTARY TABLE 2

QUANTITATIVE RT-PCR PRIMER DETAILS FOR TARGET GENES

Gene	Accession number	Sequence	Product size (bp)
BAX	NM_ 138761	5'-CCGCCGTGGACACAGACT-3' 5'-TTGCCGTCAGAAAACATGTCA-3'	70
BCL2	NM_ 000633	5'-CATGTGTGTGGAGAGCGTCAA-3' 5'-GCCGGTTCAGGTACTCAGTCA-3'	83
BCLxl	NM_ 138578	5'-CGTGGAAAGCGTAGACAAGGA-3' 5'-ATTCAGGTAAGTGGCCATCCAA-3'	73
BDNF	NM_ 001709	5'-CCAGGCCCCGCTCATT-3' 5'-CATAGGTCCTTCCGTCAAAAGC-3'	63
CREB	NM_ 004379.2	5'-CATCTGCTCCCACCGTAACTC-3' 5'-GCCGCCTGAATGACTCCAT-3'	76
GDNF	NM_ 000514	5'-TCTGGGCTATGAAACCAAGGA-3' 5'-GTCTCAGCTGCATCGCAAGA-3'	69
5HTR1A	NM_ 000524.2	5'-GCAGAACGTGGCCAATTATCTT-3' 5'-CACCAACACCGACACCATGA-3'	67
5HTR2A	NM_ 000621.2	5'-CAGCTTCCTCCCTCAGAGTTCTT-3' 5'-GACCCTGGCTCCCTATGGA-3'	72
5HTT	NM_ 001045.2	5'-CAGTCTGGTGCCCAGACTCA-3' 5'-GTCACAGTCTACCATGGGAATATGTC-3'	81
Venus GFP	EF_ 152770	5'-GGGCACAAGCTGGAGTACAAC-3' 5'-GATGCCGTTCTGCTTGTC-3'	74