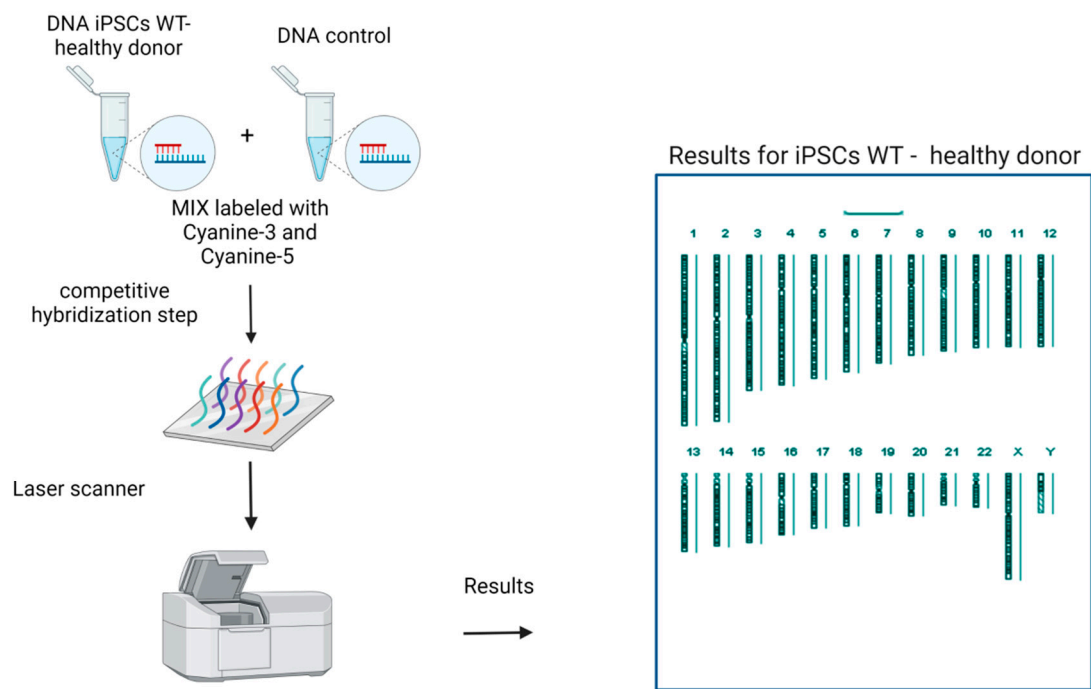


Figure S1. Array CGH analysis



On the left: Schematic representation of array-CGH analysis DNA from iPSCs WT clone versus DNA control.

On the right: Array-CGH showed the complete absence of chromosomal rearrangements on iPSCs WT clone used.

Figure S2. Immunofluorescence for synaptic proteins from different experimental group

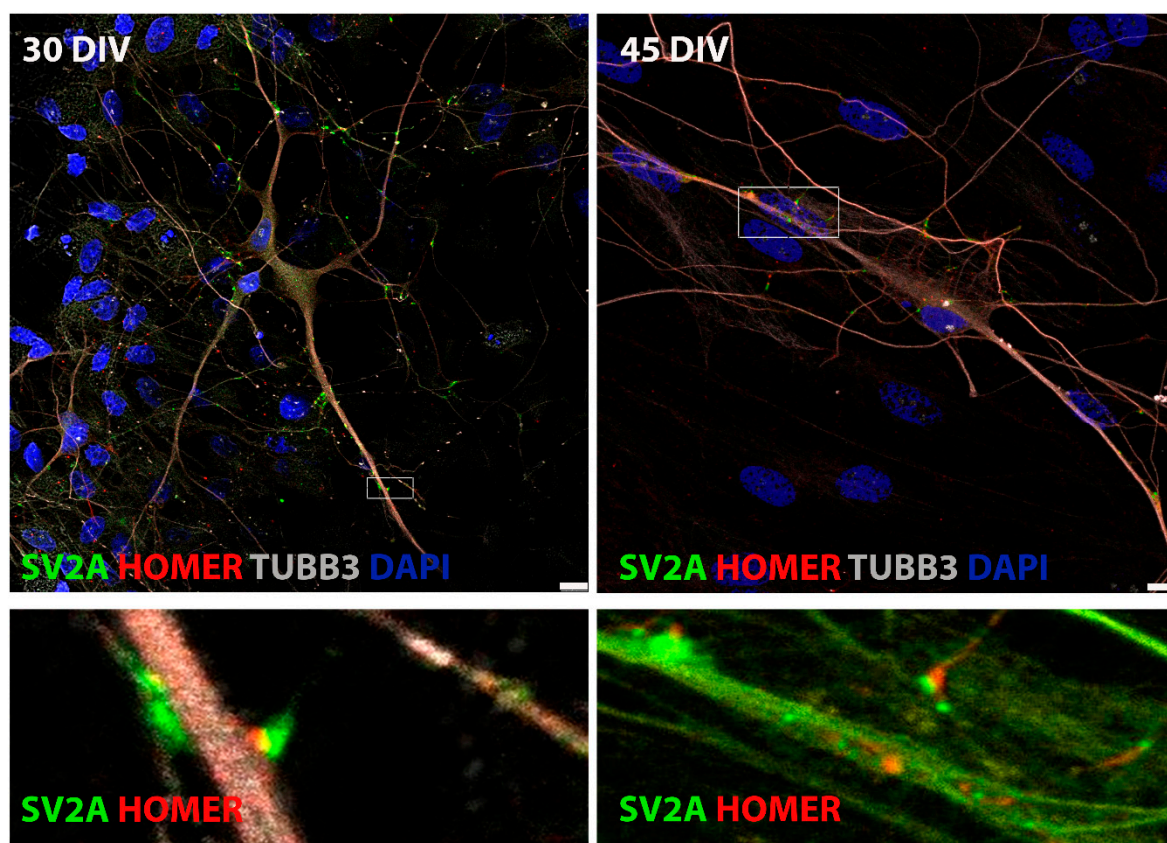


Figure S2. Representative images of expression of neuronal proteins in hiPSC-derived neurons, obtained from different experimental group. Synaptic proteins SV2A (green), HOMER (red) co-localized at synaptic sites at 30-45 DIV. Neuronal marker for microtubule element TUBB3 (gray). Total cells were stained with nuclear marker DAPI (blue). Scale bar 10 μ m.

Table S1: Primers sequences

Gene Name	Forward	Reverse	Accession number
human NANOG	TGTCTTCTGCTGAGATGCCT	AATAAGCAGATCCATGGAGGA	NM_024865.3
human NESTIN	CAGAGGTGGAAGATACGGT	AGCTCTGCCTCATCCTCATT	NM_006617
human SOX2	ACCAGCTCGCAGACCTACAT	CCTGCTGCGAGTAGGACAT	NM_003106
human SOX1	TCCTGGAGTATGGACTGTCCG	GAATGCAGGCTGAATTCGG	NM_005986
human PAX6	GATAACATACCAAGCGTGCATCAATA	TGCGCCCATCTGTTGCT	NM_000280
human CACNA1A	AAACCCACCATCACCACCGA	GTCCCAAGCCCACGGTTTTTC	NM_001127222
human CACNA1B	TGGAAGTACTTCGACCTGC	CTTGAGCACCACCTGCAAAC	NM_000718
human CACNA1D	TGAACATGGTCTTCACCGGG	TGCTGCCGATTACGATGAGG	NM_000720
human CACNA1E	CTGGCGAAGCCTTTGGGA	TCACTACGCAGTCGAAGACG	NM_001205293
human MAP2	TGAACAAGAGAAGGAAGCCCAA	GAAGGTGGCAGATTAGCTGTTT	NM_002374
human TUBB3	AGCGTCTACTACAACGAGGC	GATGTCCAAAGGCCCTGAG	NM_006086
humand PSD95	CATCCCTCCCTTTTCCCCAA	CTGCCTTCCACATGCCCC	NM_001369566
human SYP	AGTGTTTCGCTTTCATGTGGC	GGCCATCTTCACATCGGACA	NM_003179
human VAMP2	CTGCACCTCCTCCAAACCTT	CAGCTCCGACAACTTCTGGT	NM_014232
human VGAT	CAGCTGCGAGGGTCATGAG	GAACGCGATGCAAGAAGGC	NM_080552
human VGLUT2	CCAGGAAAAGAGGGGCTAAA	CGGTGTCTTGCTTCTTCTCC	NM_020346
human VGLUT3	CTCCCAAGCGTTACATCAT	ATTTCACAATGGCAACTCC	NM_139319
human CHRM3	ATCGGCAACATCCTGGTAAT	GTCACAGGCCAAGTTCCTA	NM_001375978
human GRIN1	GAAGCACGAGCAGATGTTCC	GTTGGGCTTGTCGTGAC	NM_000832
human HTR2a	GGATTTACCTGGACGTGCTC	TGGTCCAAACAGCAATGATT	NM_000621
human PPIA	GGAGGCTTTGAGGTTTGCAA	CCTGACATCTAACTGCCAGCA	NM_021130
human RPL13A	TGAAAGCACTCGGAGAATTG	ACAAGATAGGGCCCTCCA	NM_012423
human GAPDH	AGCAAGAGCACAAGAGGAAGAG	TAACTGGTTGAGCACAGGGTAC	NM_002046

Table S2: Antibodies

REAGENT or RESOURCE	SOURCE	IDENTIFIER	DILUTION	
Primary Antibodies			IF	WB
Map2	Synaptic systems	188003	1:200	
Nestin	Thermo Fisher Scientific	A24345	1:100	
Pax6	Thermo Fisher Scientific	A24340	1:100	
SOX1	Thermo Fisher Scientific	A24347	1:100	
SOX2	Thermo Fisher Scientific	A24339	1:100	
OCT4	Thermo Fisher Scientific	A24847	1:100	
SSEA4	Thermo Fisher Scientific	A24866	1:100	
SOX2	Thermo Fisher Scientific	A24759	1:100	
TRA-1-60	Thermo Fisher Scientific	A24868	1:100	
Homer-1	Synaptic systems	160 011	1:100	1:1000
SV2A	Synaptic systems	119 011	1:100	1:1000
PSD95	Synaptic systems	124 011	1:100	1:1000
Synaptophysin 1	Synaptic systems	101 101	1:100	1:1000
TUBB3	Synaptic systems	302 304	1:100	
TUBB3	Sigma	T2200		1:1000
V-GLUT2	Synaptic systems	135 421		1:1000
GAPDH	Santa Cruz	sc:47724		1:1000
GFAP	Millipore	MAB360	1:100	