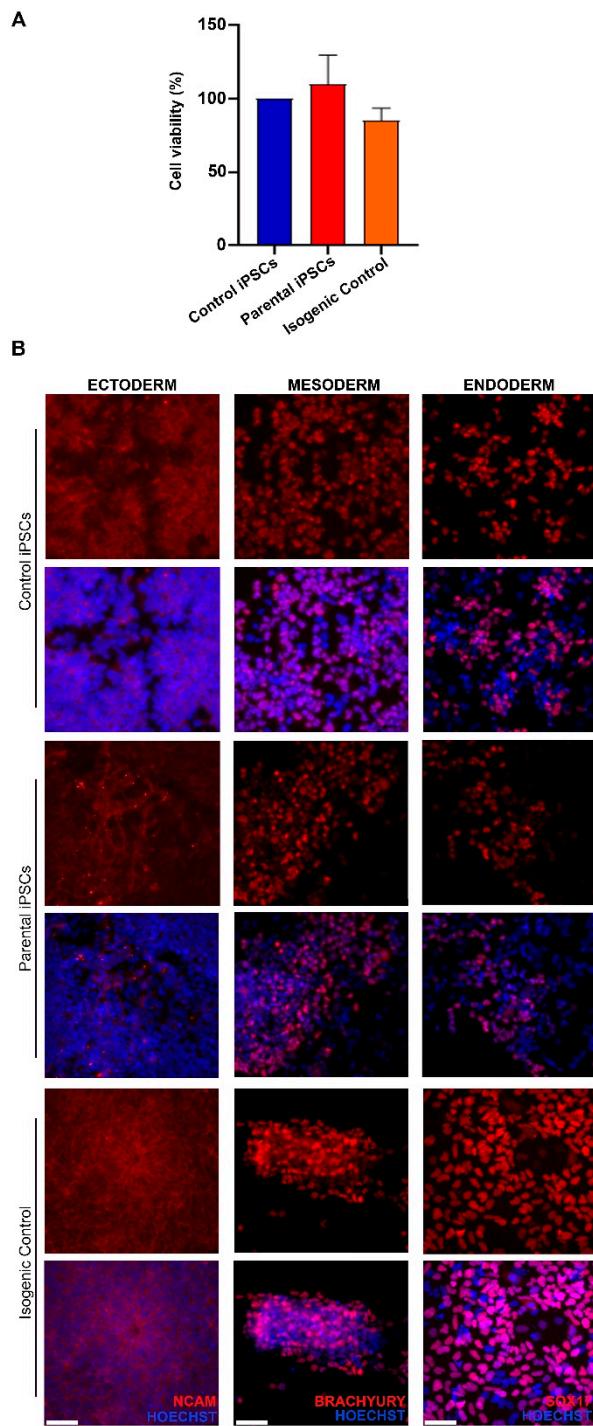


## SUPPLEMENTARY INFORMATION

**Supplementary Figure S1:** MTT assay and Trilineage differentiation assay **Supplementary Table S1:** List of primers used in this study



**Figure S1:** Isogenic iPSC line maintains its proliferative potential and its ability to differentiate into the three embryonic germ layers. (A) Cell proliferation was estimated via MTT assay. The

histogram represents the percentage of viable parental and isogenic iPSCs compared with control cells (control iPSCs, 100%). Data are presented as mean  $\pm$  SEM (normalized to control), n = 3. Ordinary one-way ANOVA parametric test is used to assess statistical significance. (B) Confocal micrographs of endoderm (SOX17), mesoderm (BRACHYURY) and ectoderm (NCAM) markers show the functional ability of control iPSCs, parental iPSCs and isogenic lines to differentiate into cells belonging to the three germ layers. Scale bar = 50  $\mu$ m.

**Table S1: List of primers used in this study**

Primer	Sequence (5'-3')	Applications
P1	ATGTTCAAAGCAGTCGCAATGG	Amplification Genomic DNA of TBCD
P2	TCTCACCTGCTCTATTAAACC	
TBCDwt	F:TCTGCCACCGTTCCCGCTGGTGAGTGCCTGC	Mutagenesis
	R: GCAGGCACTCACCAAGCAGGGAAACGGTGGCAGA	
PUΔTK	F:AACCCTAGAAAGATAAGTCTGC	Amplification selection cassette
	R:AACCCTAGAAAGATAATCATA	
P3	AGAACGCTCCTGTCAGGCATCGC	Screening targeted clones
P4	ACAAGGGTAGCGGCAGAAGATCC	
P5	AGCAATGTCTCGTACACCTGG	
M-PCR-TBCD	F:CATGTGCTGCTCCGGCAG	multiplex PCR
	R: AACACAAACAGTGCCAGCGAAG	
M-PCR-GAPDH	F:CTACACTGAGCACCAGGTG	multiplex PCR
	R: CCAGCAAGAGCACAAGAGG	
crRNA 1	CCGTTTCCCGCTGGTGAGTGCCT	gRNA (1)
crRNA 2	GCTCACGTGTGTTGCCGTGTGG	gRNA (2)
OT2	F:AGGATCGTGGATCAGCCTGC	Amplification off-target
	R: ACCTTCTCCCACCTCCGTG	
OT3	F:GGATTGGGTGCTGTTAAGGGA	Amplification off-target
	R: TCACAAAACACCAGCATCAGA	
OT4	F:ATGCCCTGGTTGCTCCCAGAG	Amplification off-target
	R: CAGGTTCTGCCAGAAGAACCC	
OT5	F:CTGTCTGACCTGACAAGCCA	

	R:CCGAAATCAGCTTGGTCTTG	Amplification off-target
OT6	F:TCCCTCCTCCTCCTTCAGTC	Amplification off-target
	R:CAGCGAGGATCGTGTGGTTTC	
OT7	F:CTTGCTAGCCACCCACCGAAT	Amplification off-target
	R:TCATCCCTGACCCTAACGCACAAA	
OT8	F:TAACCGCGGGCTACACAGT	Amplification off-target
	R:GCTCTGTAACCTGGGAGAC	
OT9	F:TTCAGTTCGCTGTGCTCGGC	Amplification off-target
	R:CCATCACTAGAGTCCGCTGTG	
OT10	F:CTGGGCCCTCCACACACAG	Amplification off-target
	R:GGGACAGCTGTTGCAGCTCAGC	
GAPDH	F:TGCACCACCAACTGCTTAGC	qPCR
	R:GGCATGGACTGTGGTCATGAG	
OCT4	F:AGCGAACCACTATCGAGAAC	qPCR
	R:TTACAGAACCAACTCGGAC	
SOX2	F:AGCTACAGCATGATGCAGGA	qPCR
	R:GGTCATGGAGTTGTACTGCA	