

**Supplementary Table 8:** Oligonucleotide sequences used in this study

Oligo name	Oligo sequence (5' -> 3')	Tm (°C)	ET (s)	Polymerase
<b>CRISPR/Cas9 SVA editing</b>				
sgRNA 7 SVA-F	CACCGTGTTTAGTTTTACAAGACA			
sgRNA 7 SVA-R	AACTGTCTTGATAAACTAAACAC			
sgRNA 9 SVA-F	CACCGATGTGGAAAAAATGTAC			
sgRNA 9 SVA-R	AAACGTACATTTTTTTCCACATC			
<b>Novel DSC validation</b>				
DSCn1_A-F	GAGACAGAGTCACTATATCCTG	60	15	Phusion
DSCn1_A-R	GGATAAGAGTAAGAATACAGATGG			
DSCn1_B-F	GAATACAGATGGGCACGGTG	64	60	PrimeStar GXL
DSCn1_B-R	GAGACAGAGTCACTATATCCTG			
DSCn4-F	CCC GCC ACCAA ACCCGAGTA	60	60	PrimeStar GXL
DSCn4-R	AGCCGGTCGTTGTTGCGTGT			
DSCn6_inner-F	CTAGGTGTGGTGGTTCATGC	65	15	Phusion
DSCn6_inner-R	TCCGTGGCTCAAATGATCC			
DSCn6_outer-F	GCCCCGCCATCTATTTGTTT	60	30	Phusion
DSCn6_outer-R	CGAACTCCGTGGCTCAAAT			
DSCn6-Seq-F	GACTGTAATGTGCTTGATGTG			
DSCn7_inner-F	AGAGGGATGAATACGTGGAGT	61	15	Phusion
DSCn7_inner-R	TTGCTGTTAGCCGAGATTGC			
DSCn7_outer-F	TGACATTCTGAAAGGGCAA	65	30	Phusion
DSCn7_outer-R	GGTGCGGTGACTCATGACTA			
DSCr1-F	CGCCTTCCCCCTCCTCCTA	64	60	PrimeStar GXL
DSCr1-R	GCACCGTTTCTCCCTCCCT			
DSCr11_A-F	GAGACGGAATTTTACTCTCGTTG	60	15	Phusion
DSCr11_B-F	GGTACTTATTTCTCCAGCTTCG			
DSCr11-R	GTCTTGACTTCCATTCACAGG			
DSCr12-F	TGGGAGGCAAGGCAATACAG	62	60	PrimeStar GXL
DSCr12-R	GTTTCCAATATCCCTGAGTTCTAG			
DSCn33_A-F	TAAGAGGCAGAGTCTCGTTCTG	60	15	Phusion
DSCn33_A-R	AGAGGCTGGTGGATTACCTG			
DSCr33_B-F	GAGGCAGAGTCTCGTTCTGTCG	62	60	PrimeStar GXL
DSCr33_B-R	GTGTCTCAAATTAGCCGGCTGT			
DSCr33_B-Seq-R	CAGGCACAGTGGCTCACGCCT			
DSCr5-F	TTGCCCCCTTTGGGCTGCTT	64	60	PrimeStar GXL
DSCr5-R	GCAGAACTGGGGAGGGGGT			
DSCr6-F	CTGCTTCCAGCGCCTCTCCT	64	60	PrimeStar GXL
DSCr6-R	CCCCAGATGTGTGGCTGGTGT			
DSCr7_A-F	GAATGGATTGCTTGAGCCAG	60	15	Phusion
DSCr7_B-F	GCACCGTGGCTCATTCTATG			
DSCr7-R	GTGTTATTGTCTGGGCATGGTG			
DSCr9-F	GAGTCTGTTCTGTGGCCAAG	60	15	Phusion
DSCr9-R	ATTGCGCCACTACACTGCAG			
<b>Cell model development iPSC reprogramming</b>				
NANOG-F	CAGTCTGGACACTGGCTGAA			
NANOG-R	CTCGCTGATTAGGCTCCAAC			
OCT4-F	TGTA CT CCTCGGTCCCTTTC			
OCT4-R	TCCAGGTTTTCTTTCCCTAGC			
REX1-F	TGGACACGTCTGTGCTCTTC			
REX1-R	GTCTTGGCGTCTTCTCGAAC			
SOX2-F	GCTAGTCTCCAAGCGACGAA			
SOX2-R	GCAAGAAGCCTCTCCTTGAA			
hTERT-F	TGTGCACCAACATCTACAAG			
hTERT-R	GCGTTCTTGGCTTTCAGGAT			
DNMT3B-F	ATAAGTCAAGGTGCGTCGT			
DNMT3B-R	GGCAACATCTGAAGCCATTT			