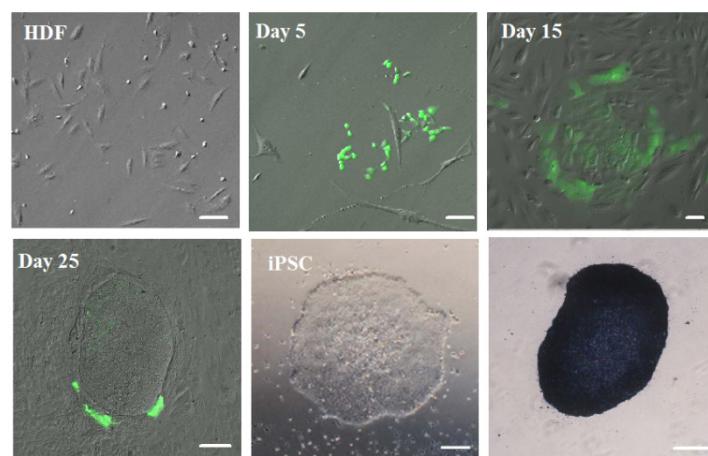


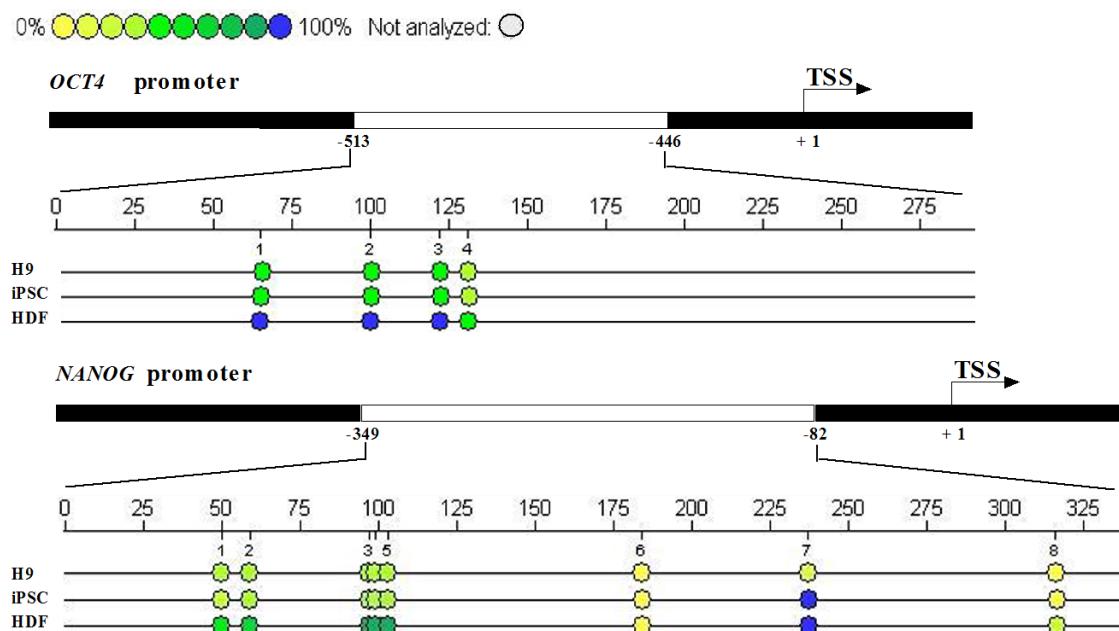
# Supplemental information

**Figure S1**

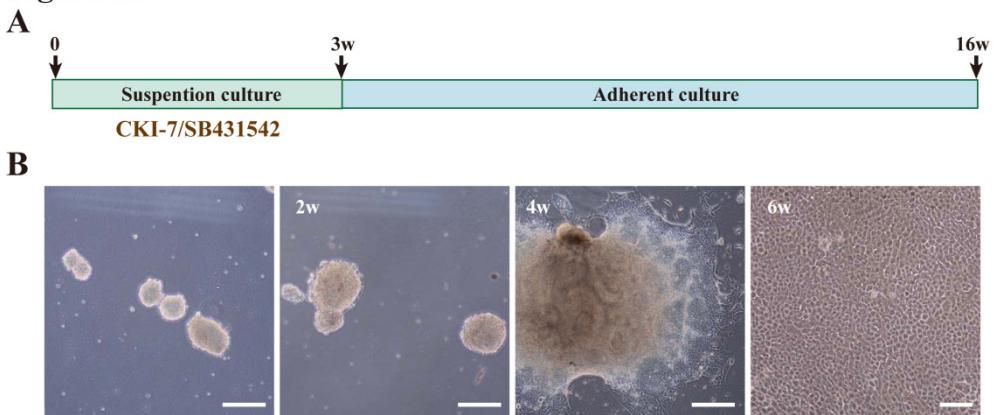


**Figure S1.** HDFs morphologic changes in the iPSCs derivation at day 5, day 15, and day 25 after electrotransfection with episomal plasmid. GFP represented transformed cells. Scale bar = 20  $\mu$ m. iPS clone was stained with alkaline phosphatase, Scale bar = 200  $\mu$ m.

**Figure S2**



**Figure S2.** Bisulfite genomic sequencing of the promoter regions of *OCT4* and *NANOG* in H9 cells, iPSCs and HDFs. Different colors indicate the level of methylated CpGs.

**Figure S3**

**Figure S3.** A. Schema of RPE differentiation protocol. B. Morphology of representative floating EB-like structures at 1 and 2 weeks. After that EBs were adhered on matrigel-coated dishes for differentiation. Polygonal cells were occurred at week 6. Scale bar = 200  $\mu$ m.

**Table S1. Primers used for PCR**

Gene	Primer Sequence(5' to 3')	AT(°C)	Product(bp)
<i>Endo-OCT4</i>	F- GTACTCCTCGGTCCCTTCC R- CAAAAACCTGGCACAAACT	56	168
<i>Endo-SOX2</i>	F- CATGTCCCAGCACTACCAGA R- GTCATTGCTGTGGGTGATG	56	243
<i>Exo-OCT4</i>	F- ACTTCACTGCACTGTACTCCTC R- CATAGCGTAAAAGGAGCAACA	56	212
<i>Exo-SOX2</i>	F- CATGTCCCAGCACTACCAGA R- TACATCCCCAGCCAGTTGA	56	145
<i>CD9</i>	F- GTGCATGCTGGGACTGTTCTCGGCTTC R- CACGCCCCCAGCCAAACCACAGCAG	56	360
<i>DPPA5</i>	F- ATATCCGCCGTGGTGAAAGTT R- ACTCAGCCATGGACTGGAGCATCC	56	243
<i>DNMT3B</i>	F- TGCTGCTCACAGGGCCGATACTTC R- TCCTTCGAGCTCAGTGCACCACAAAAC	56	242
<i>GRB7</i>	F- CGCCTCTCAAGTACGGGTGCAGCTGT R- TGGGCAGGCTGAGGCGGTGGTTG	56	241
<i>NANOG</i>	F- CAGCCCCGATTCTCCACCAGTCCC R- CGGAAGATTCCCAGTCGGITCACC	56	391
<i>OTX2</i>	F- CAAAGTGAGACCTGCCAAAAAGA R- TGGACAAGGGATCTGACAGTG	56	179
<i>SIX3</i>	F- CAAGGAGTCTCACGGCAAG	56	163

---

	R- GCAATGCGTCTCTGCTCG		
<i>RX1</i>	F- AAGCCTCATCATAGTTCCAGTC R- AAGCCTCATCATAGTTCCAGTC	56	168
<i>MITF</i>	F- TTGTCCATCTGCCTCTGAGTAG R- CCATTAGTAAGTCCACATTCAATTCC	56	88
<i>RPE65</i>	F- TACAGAAAGCACTGAGTTGAGC R- CCATTAGTAAGTCCACATTCAATTCC	56	154
<i>TYR</i>	F- GCAAAGCATACCATCAGCTCA R- GCAGTGCATCCATTGACACAT	56	145
<i>SILVER</i>	F- AGGTGCCTTCTCCGTGAG R- AGCTTCAGCCAGATAGCCACT	56	128
<i>GAPDH</i>	F- GGACTCATGACCACAGTCCATGCC R- TCAGGGATGACCTTGCCCCACAG	56	152

---