Gene	Forward primer	<b>Reverse primer</b>
OCT4	CAATTTGCCAAGCTCCTGA	CGTTTGGCTGAATACCTTCC
NANOG	ATGCCTCACACGGAGACTGT	AGGGCTGTCCTGAATAAGCA
SOX2	ATGGGTTCGGTGGTCAAGT	GGAGGAAGAGGTAACCACAGG
KLF4	TCTCAAGGCACACCTGCGAA	TAGTGCCTGGTCAGTTCATC
VSX2	ACCAGACCAAGAAACGGAAGAAGC	TCTGGGTAGTGGGCTTCGTTGAAT
GFAP	AGCCTGGACACCAAGTCTGT	CGGAGCAACTATCCTGCTTC
RECOVERIN	CTCCTTCCAGACGATGAAAACA	GCCAGTGTCCCCTCAATGAA
BRN3B	AGCGCTCTCACTTACCCTTACACA	AAATGGTGCATCGGTCATGCTTCC
BEST1	ATTTATAGGCTGGCCCTCACGGAA	TGTTCTGCCGGAGTCATAAAGCCT
MERTK	AGCCTGAGAGCATGAATGTCACCA	TGTTGATCTGCACTCCCTTGGACA
MITF	TTCACGAGCGTCCTGTATGCAGAT	TTGCAAAGCAGGATCCATCAAGCC
PEDF	AGATCTCAGCTGCAAGATTGCCCA	ATGAATGAACTCGGAGGTGAGGCT
RPE65	GCCCTCCTGCACAAGTTTGACTTT	AGTTGGTCTCTGTGCAAGCGTAGT
OCCLUDIN	TCCTATAAATCCACGCCGGTTCCT	AGGTGTCTCAAAGTTACCACCGCT
CRALBP	TTCCGCATGGTACCTGAAGAGGAA	ACTGCAGCCGGAAATTCACATAGC
FN1	AATATCTCGGTGCCATTTGC	AAAGGCATGAAGCACTCAAT
ACTA2	TGACTGAGCGTGGCTATTCC	GCCCATCAGGCAACTCGTAA
KRT18	GGCATCCAGAACGAGAAGGA	AGTGCTCCCGGATTTTGCT

Table 1: Primers used for amplifying genes.



**Figure S1. Characterization of hiPSCs derived from four different individuals. (A-H)** Immunocytochemistry analysis demonstrating the expression of pluripotency markers in all four undifferentiated hiPSC lines. **(I-T)** Teratoma analyses of hiPSC lines showing the presence of endodermal, ectodermal, and mesodermal germ lineage derivatives. Scale bar = 100 μm.

## Passage 0 Passage 1 **DAPI RCVRN DAPI RCVRN DAPI <b>S100 DAPI <b>S100**

**Figure S2. Expression of neuroretinal markers in passaged hiPSC-RPE.** Representative confocal images showing rare expression of neuroretinal proteins (RCVRN, S100) in P0, but not P1, hiPSC-RPE. Cells from both passages were acutely dissociated, fixed, and immunostained for 24 hours prior to imaging with confocal microscopy. Scale bar =  $50 \mu m$ .