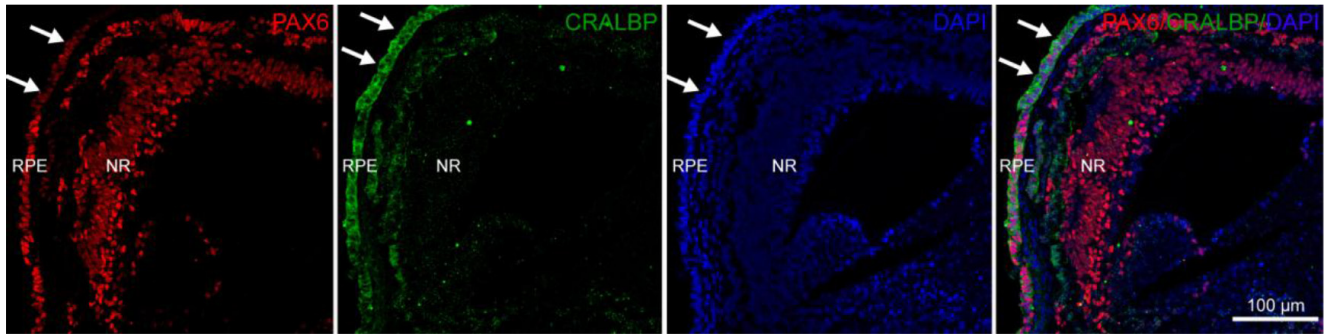
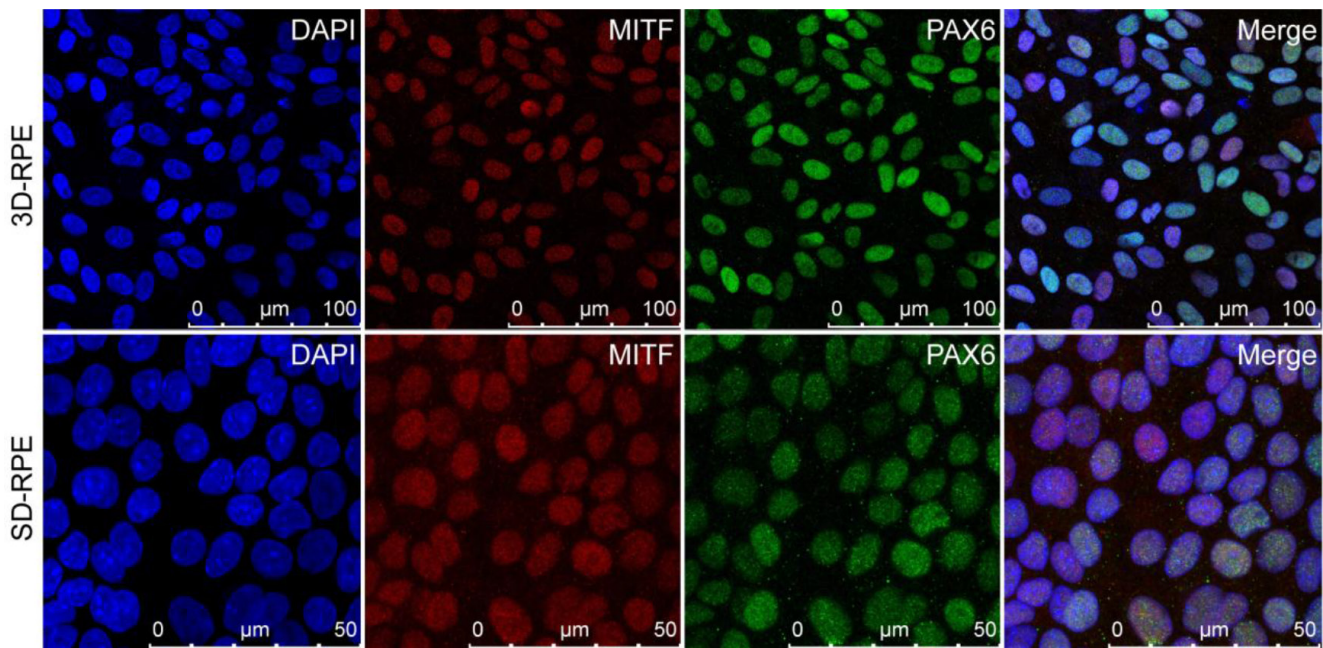


# Features specific to retinal pigment epithelium cells derived from three-dimensional human embryonic stem cell cultures — a new donor for cell therapy

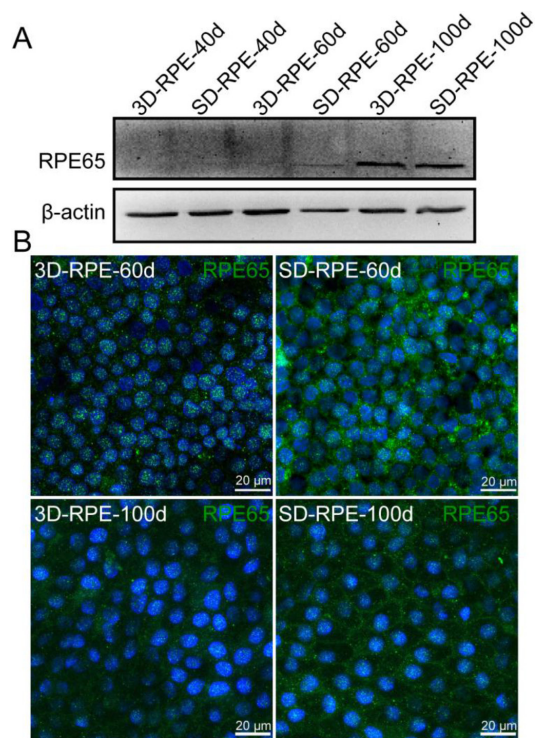
## Supplementary Materials



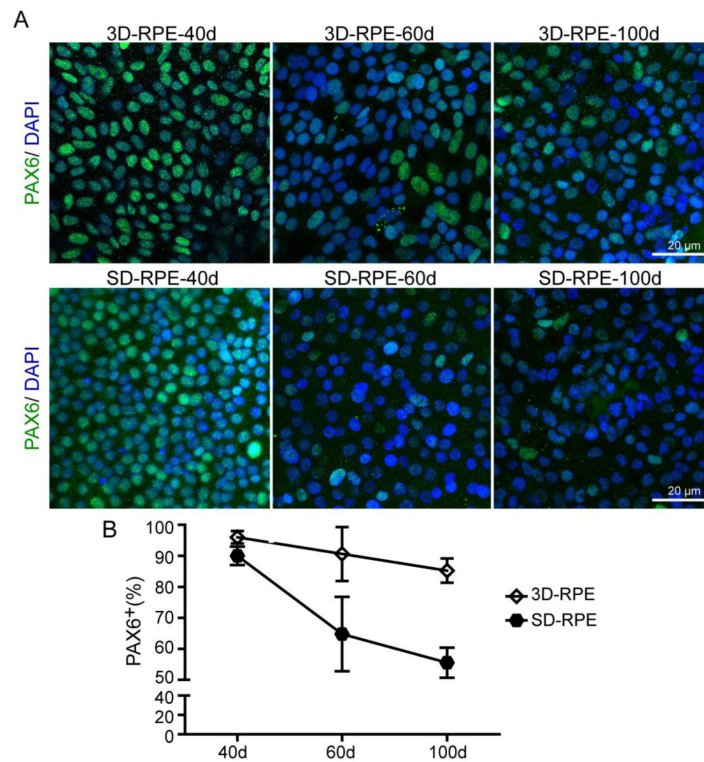
Supplementary Figure S1: The Immunostaining of optic cup. Abbreviations: neural retina (NR).



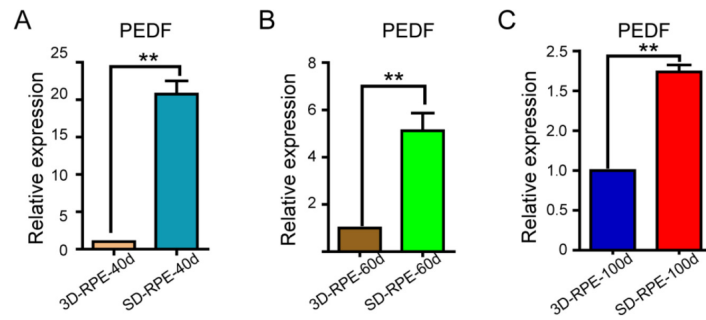
Supplementary Figure S2: The Expression of MITF and PAX6 in 3D-RPE and SD-RPE Cells.



**Supplementary Figure S3: The Expression of RPE65 in 3D-RPE and SD-RPE Cells.** (A) Immunoblotting of RPE65 of 3D-RPE and SD-RPE at day 40, day 60 and day 100. (B) Immunofluorescence of RPE65 of 3D-RPE and SD-RPE at day 60 and 100 with nuclear staining with DAPI (blue).



**Supplementary Figure S4: The Expression of PAX6 in 3D-RPE and SD-RPE Cells.** (A) Immunostaining of PAX6 (green) of 3D-RPE and SD-RPE at day 40, day 60 and day 100 with nuclear staining with DAPI (blue). (B) Percentage of positive PAX6 stained cells normalized to the number of DAPI stained nuclei (bars: mean  $\pm$  s.d.).



**Supplementary Figure S5: The Expression of PEDF in 3D-RPE and SD-RPE Cells.** (A–C) RT-qPCR analysis of PEDF expression in 3D-RPE and SD-RPE cells at day 40, 60 and 100 (bars: mean  $\pm$  s.d.). GAPDH was used as an internal control. Double asterisk (\*\*) indicated  $p$  value  $< 0.01$ .

**Supplementary Table S1: Primers for RT-qPCR**

Name	Sequence
BEST1-F	TCCCACCTGCCTAGTCGCCA
BEST1-R	TTCTAGATGCTGCCCCGCCA
CRALBP-F	CCCCGCCACACCTTGCAGAA
CRALBP-R	TTCCGTGCGCGGATGAAGCG
RPE65-F	CAGATGCCTTGAAGAAGATG
RPE65-R	GGCATT CAGAATCAGGAGATAAG
PEDF-F	GGGAGCGGAGCAGCGAACAG
PEDF-R	GGTCCAAGCGAGGGTTGCC
GAPDH-F	AGCCTCCCGCTTCGCTCTCT
GAPDH-R	CCAGGCGCCAATACGACCA