

Table S1 A list of antibodies used in this project, the animals they were raised in, their optimized concentrations, and their specificity and function.

Antibody	Animal	Manufacturer	Conc.	Specificity and function	Reference
CRALBP	Mouse	Abcam cat # ab15051	1/500	An essential protein for the visual recycling function of RPE	[49, 50]
melanopsin	Rabbit	Advanced Targeting Systems cat # Ab-n38	1/500	Allows RPE to absorb light to protect the retina against photo-oxidation	[11]
RPE65	Mouse	Abcam cat # ab13826	1/500	An essential isomerohydrolase enzyme in the retinoid visual cycle	[102]
Sox9	Rabbit	Millipore cat # ab5535	1/500	Transcription factor that regulates the expression of important genes in RPE like BEST1 and RPE65	[103, 104]
ZO-1	Mouse	Invitrogen cat # 339100	1/50	Tight junction marker is reported to regulate RPE homeostasis	[105]
LRAT	Rabbit	Abcam cat # ab137304	1/500	An essential protein for the retinol uptake by RPE and 11-cis retinal recycling	[51, 102]
β-catenin	Rabbit	Cell Signalling cat # 8814	1/500	Signalling molecule that is linked to inducing the expression of Mitf and OTX2 in development	[106]
Best1	Mouse	Abcam cat # ab2182	1/500	Found in the basolateral side of the RPE and preserves calcium ion regulation	[52, 53]
MITF	Rabbit	Abcam cat # ab20663	1/500	RPE specific transcription factor that is crucial for RPE differentiation and function	[55]
Laminin	Rabbit	Abcam cat # ab11575	1/200	Extracellular matrix secreted by RPE apically and basally contribute to the structure of the basement membrane and interphotoreceptor matrix.	[56, 57]
Fibronectin	Rabbit	Abcam cat # ab23750	1/200	As per laminin	

Collagen IV	Rabbit	Abcam cat # ab6586	1/200	As per laminin	
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Additional supplemental references related to Table S1.

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