Conditional loss of the exocyst component Exoc5 in retinal pigment epithelium (RPE) results in RPE dysfunction, photoreceptor cell degeneration, and decreased visual function.

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Supplementary Fig. S1: Generation of *tdTomatoExoc5fl/fl* mice and genotyping for conditional *tdTomatoExoc5fl/fl;Best1-Cre* mice. (A) No tdTomato expression (red) was seen in *tdTomatoExoc5fl/fl* mice, (B) while tdTomato expression (red color in RPE) occurred in *tdTomato Exoc5fl/fl;Best1-Cre/+* mice, confirming conditional loss of EXOC5 in RPE cells. (C) PCR based genotyping for identification of control *tdTomatoExoc5fl/fl* and experimental *tdTomatoExoc5fl/fl;Best1-Cre/+* mice.
Supplementary Fig. S2: Quantification of photoreceptor lengths. (A) 3.5 days post fertilization (dpf) zebrafish, (B) 20-week old Exoc5⁻/⁻ and WT mice, and (C) 27-week old Exoc5⁻/⁻ and WT mice.
Supplementary Fig. S3: Measurement of visual function in Exoc5fl/fl;Best1-Cre<sup>+</sup> mice by full-field Electroretinography (ERG) and c-wave function. Data are expressed as mean ± SEM (Exoc5 fl/fl;Best1 -Cre<sup>+</sup>: n=10; and Exoc5 fl/fl;Best1 -Cre<sup>+</sup> mice: n=10).