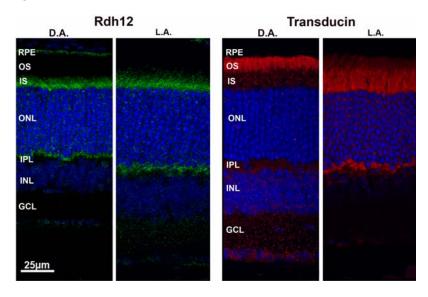
## **Supplement Figure Legends**

Supplement Figure 1. Rdh12 immunolocalization dark-adapted and light-adapted mouse retina. Wild-type mice (albino L/L) were maintained in darkness overnight or exposed to 2000 lux fluorescent white light for 2 h. Retina/RPE/choroid cryosections were incubated with primary antibody specific for mouse Rdh12 or transducin, and then with streptavidin-AlexaFluor-488 (green) and -555 (red), respectively. DAPI (blue) was used to label cell nuclei. Sections were imaged using fluorescence confocal microscopy. D.A., dark-adapted; L.A., light-adapted. OS, outer segments; IS, inner segments; ONL, outer nuclear layer; OPL, outer plexiform layer; INL, inner nuclear layer; IPL, inner plexiform layer; GCL, ganglion cell layer.

Supplement Figure 2. Retinal histology and ONL thickness in Rdh12-deficient and wild-type mice at advanced age and on various genetic backgrounds. Measurements of ONL thickness were obtained from plastic sections of retina parallel to the vertical meridian of the eye and plotted vs. distance from the optic nerve head  $\pm$  std. dev. (n=3). Phase contrast micrographs show representative Lee's stained retina/RPE/choroid sections (7 µm) from central retina. (A) Rdh12-/- and wild-type (pigmented L/L; ~20 mo old). (B) Rdh12-/- and wild-type (pigmented M/M; ~20 mo old). (C) Rdh12-/- and wild-type (albino L/L, ~6 mo old). (D) Rdh12-/- and wild-type mice heterozygous for the Sod2 gene (pigmented M/M; ~9 mo old). Rdh12-/-,  $\odot$ ; wild-type,  $\bullet$ . Retina layers labeled as in Supplement Fig. 1.

## Supplement Figure 1



## Supplement Figure 2

