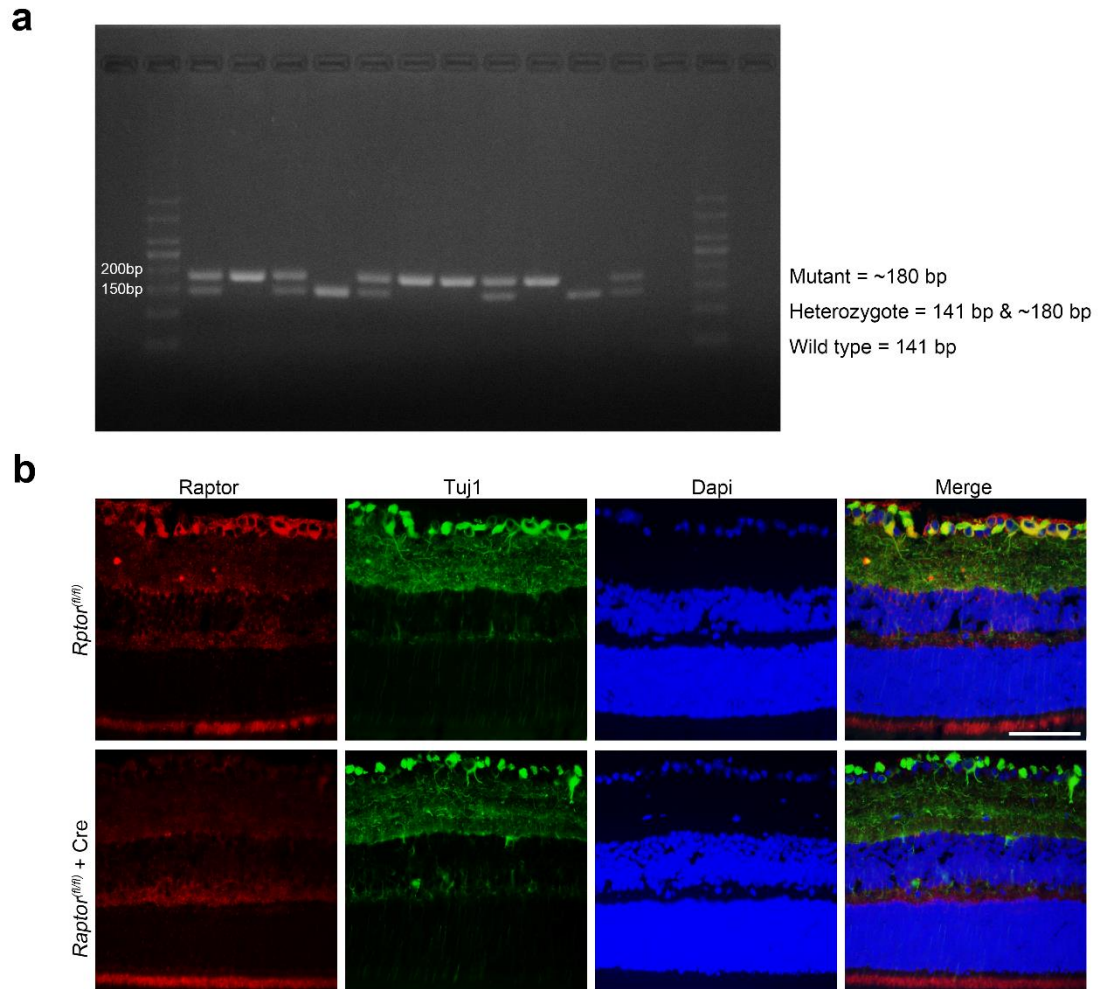


**Figure S1. AAV-Cd82 transfection in retina, ON and ONH.** (a) Immunostaining of AAV tag mCherry shown in retina, ON and ONH in CTR, AAV-Vehicle, AAV-Cd82 groups 28 days after virus injection, n=5 eyes. Scale bar, 50 $\mu$ m. (b) Co-immunofluorescent staining of mCherry (red) with RGC marker Tuj1 (green) in AAV-Cd82 group 28 days after virus injection, n=5 eyes. Scale bar, 50 $\mu$ m.



**Figure S2. Knockdown of Raptor in *Raptor<sup>fl/fl</sup>* mouse. (a)** Genotyping of wild type, *Raptor<sup>fl/+</sup>* and *Raptor<sup>fl/fl</sup>* mice by agarose gel electrophoresis. **(b)** Co-immunofluorescent staining of Raptor (red) with RGC marker Tuj1 (green) in retina sections of *Raptor<sup>fl/fl</sup>* mice with or without knockdown of Raptor by Cre. Scale bar, 50 $\mu$ m.