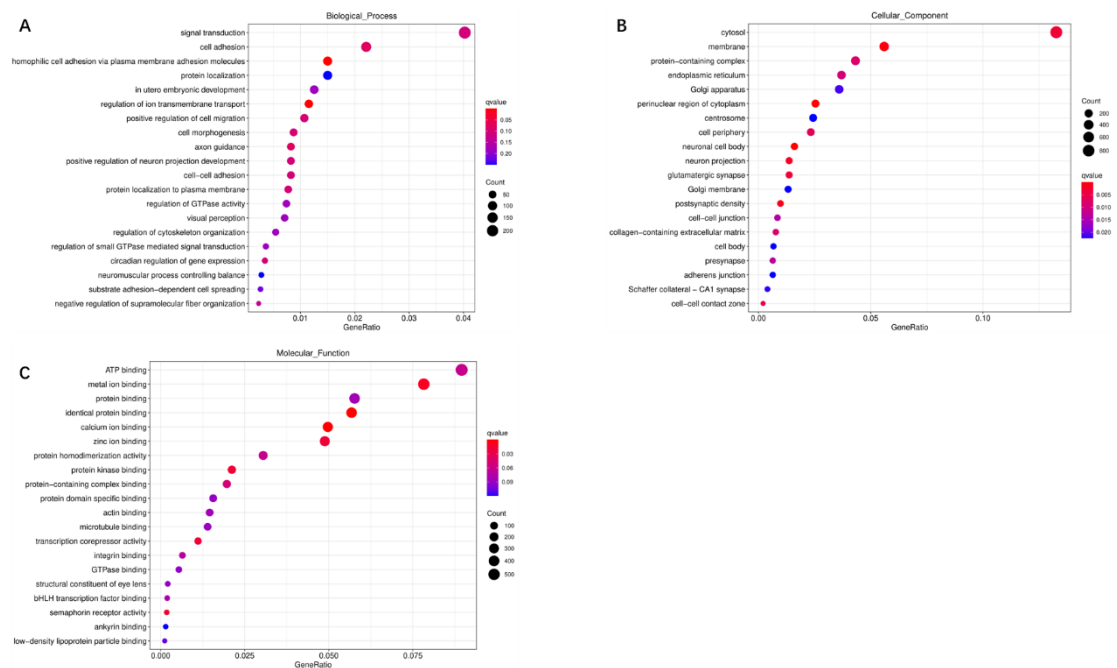
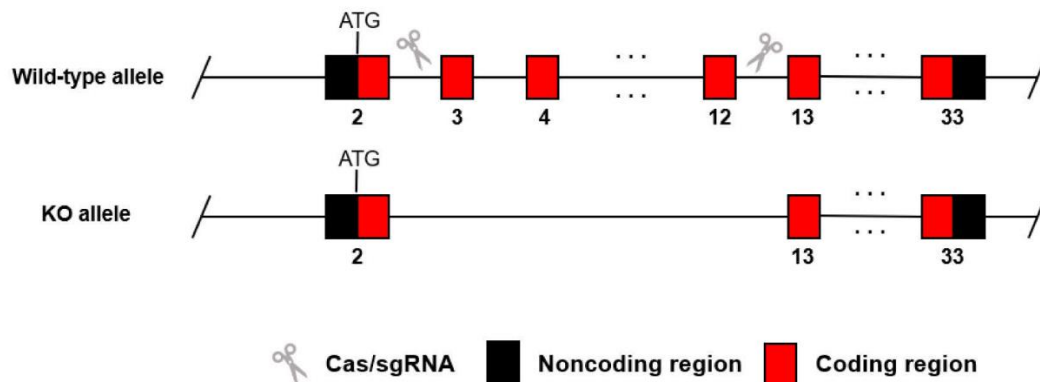


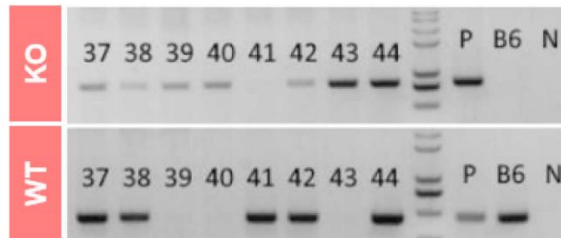
**Supplementary Figure S1.** Retinal function of Cep250 KO and WT mice at P180 determined by ERG. Statistical analysis of a-wave and b-wave amplitudes. \*P < 0.05, ns = no significance. Student's t-test.



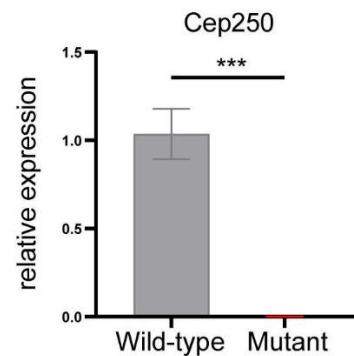
**Supplementary Figure S2.** GO enrichment analysis of the DEGs from Cep250 KO retinas compared to WT retina. (A) involved in Biological\_Process (BP) of GO enrichment. (B) involved in Cellular\_Component (CC) of GO enrichment. (C) involved in Molecular\_Function (MF) of GO enrichment.

**A****B**

PCR number	Primer name	Primer sequences	PCR products
1. KO	Cep250-KO-F	CGTGTAGTACCAAACATCCTGGTG	WT:9380bp Targeted:~799bp
	Cep250-KO-R	AAGCCAAAATCTACAGCAACCCTC	
2. WT	Cep250-WT-F	CCCAACCTGGAACAGTTGCTGA	WT:438bp Targeted:0bp
	Cep250-WT-R	GCAAGGCTTTATTACACCATCG	

**C**

Genotyping results: Mutant: 39, 40, 43 Wild-type: 41

**D**

**Supplementary Figure S3.** Generation of Cep250 KO mice. (A) Cep250 KO mice were generated in a C57BL/6J background using the CRISPR/Cas9 system. (B-C) The Genotyping primers and example genotyping results of Cep250 KO mice and Wild-type mice. (D) RT-PCR analysis of Cep250 KO mice and Wild-type mice. \*\*\* $P < 0.001$ , Student's t-test.