

Fig. S1. Intraperitoneally injected EdU reaches the eye. The cornea of the WT (A,A') and *Prom1*-KO (B,B') eyes examined in Fig. 2H-H'' and Fig. 2I-I'', respectively, was examined for incorporation of EdU-positive cells. Nuclei were stained with DAPI. Scale bar in (A) is 100 μ m and applies to all images.

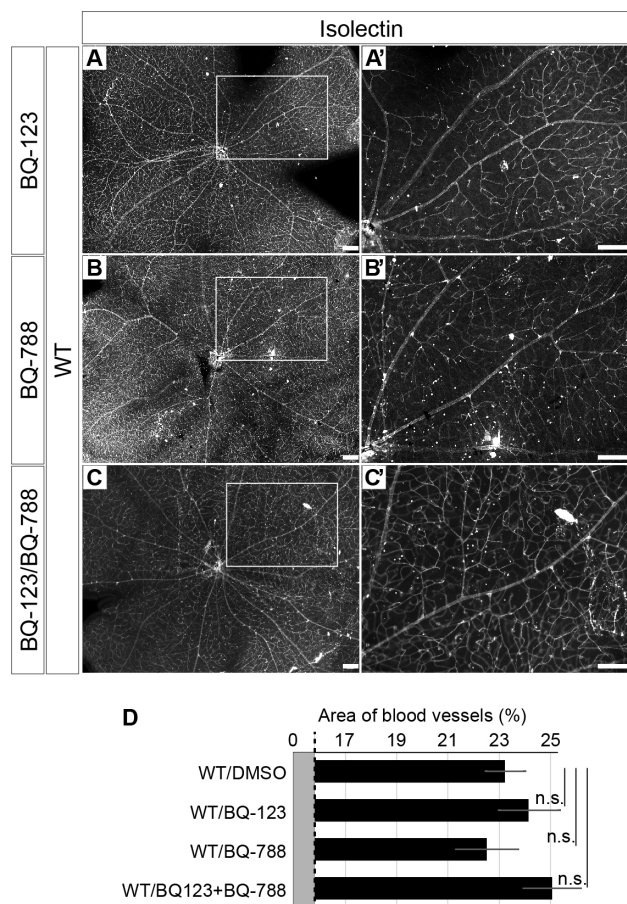


Fig. S2. Endothelin receptor antagonists do not affect retinal vessels of WT mice. (A-C') Isolectin staining of the retina of WT mice treated with BQ-123 (A,A'), BQ-788 (B,B'), or both agents (C,C') as in Fig. 5 and 6. The boxed regions of (A,B,C) are shown at higher magnification in (A',B',C'), respectively. Scale bars, 100 μ m. (D) Area of blood vessels measured in images similar to those in (A) to (C'). Data are means \pm s.e.m. for five retinas per condition. Note that the data for WT/DMSO are the same as those in Fig. 6F. n.s., not significant (one-way ANOVA followed by Tukey's post hoc test).

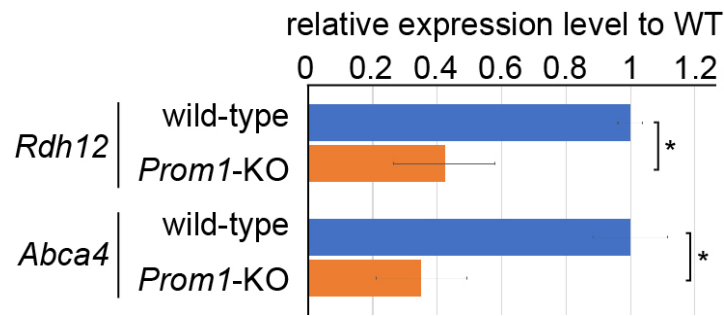


Fig. S3. Expression of *Rdh12* and *Abca4* is down-regulated in the retina of *Prom1*-KO mice at P14. The retina of WT or *Prom1*-KO mice at P14 was subjected to RT-qPCR analysis of *Rdh12* and *Abca4* expression. Data are means \pm s.e.m. for three retinas per condition. * $P < 0.05$ (two-tailed Student's *t* test.)

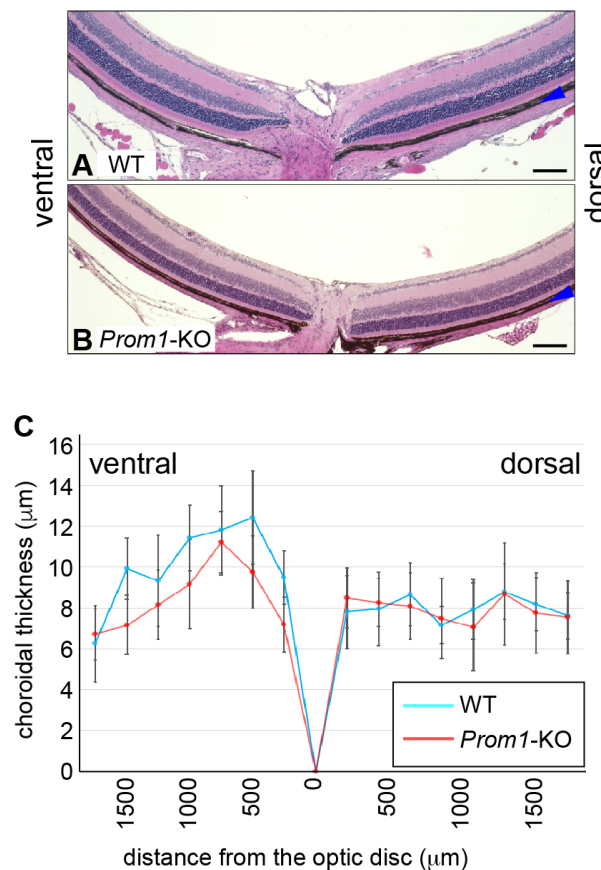


Fig. S4. Choroidal thickness is similar for WT and *Prom1*-KO mice at 4 weeks of age. (A,B) Hematoxylin-eosin staining of the retinas of WT (A) and *Prom1*-KO (B) mice at 4 weeks of age. Blue arrowheads indicate the choroid. Scale bars, 100 μ m. (C) Choroidal thickness in sections similar to those in (A) and (B) was measured every 250 μ m from the optic disc. Data are means \pm s.e.m. for four retinas per condition. No significant difference was apparent between the values for the two genotypes at each distance examined (two-tailed Student's *t* test).

Table S1. RNA-sequencing analysis of the retina of *Prom1*-KO and WT mice at P14.

[Click here to download Table S1](#)

Table S2. RNA-sequencing analysis of the retina of *Prom1*-KO and WT mice at P21.

[Click here to download Table S2](#)

Table S3. Complete list of pathways affected in the retina of *Prom1*-KO mice at P21 according to GO term analysis.

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Table S4. Sequences of PCR primers used for this study.

Gene	Gene ID	Forward	Reverse
<i>Edn2</i>	13615	GGACATCATCTGGGTGAACA	CAGAAGGTAGCACAGGCAGA
<i>Bcl3</i>	12051	TGCTGAACCTGCCTACTCAC	CAGCGCTATGTTATTCTGG
<i>Gfap</i>	14580	TGGAGGAGGAGATCCAGTTC	GAGTGCGAATCTCTCTCAGG
<i>Gapdh</i>	14433	ACAACCTTTGGCATTGTGGAA	GATGCAGGGATGATGTTCTG
<i>Rdh12</i>	77974	CCAGGAACTCCTACCTGCTG	ACCCACATCCTCTTGCAGTC
<i>Abca4</i>	11304	GGAAGTACAGACATTGCCTGCA	AGAAGTCCACATCGGCATACAGAGT