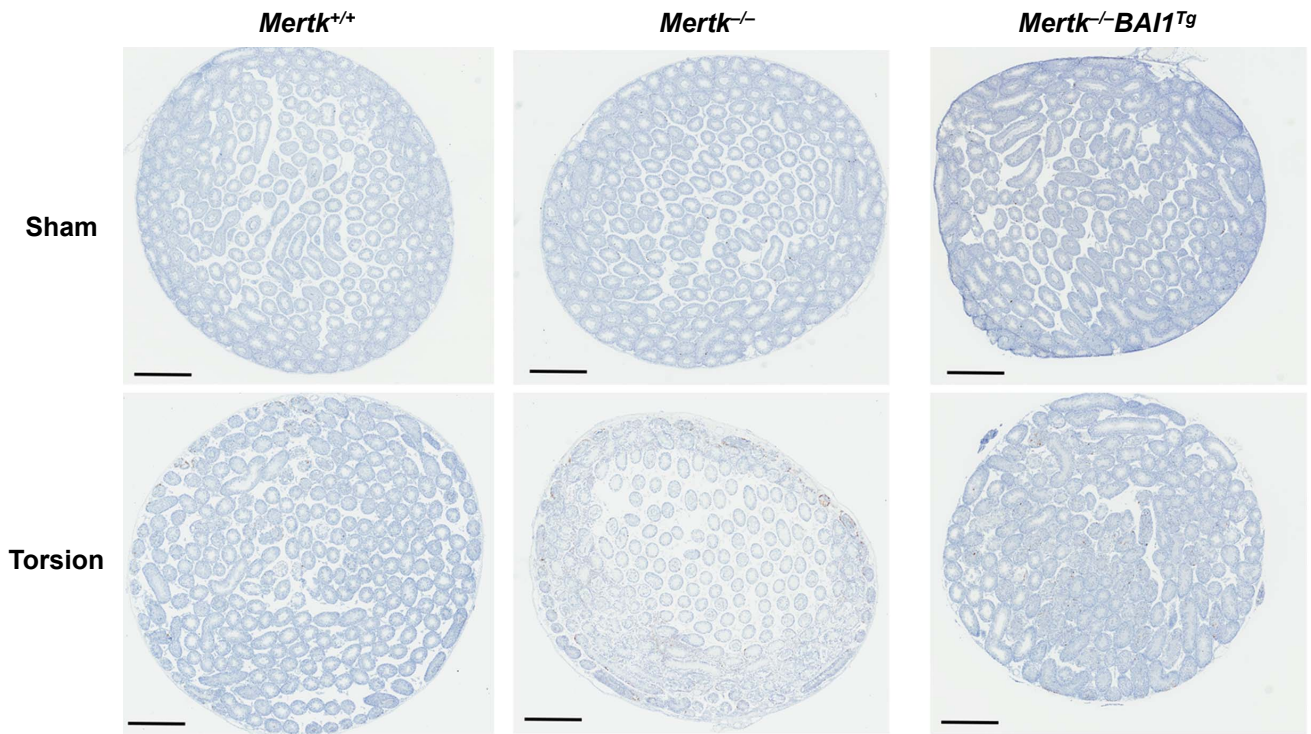


# Supplementary Figures

## Context-dependent compensation among phosphatidylserine- recognition receptors

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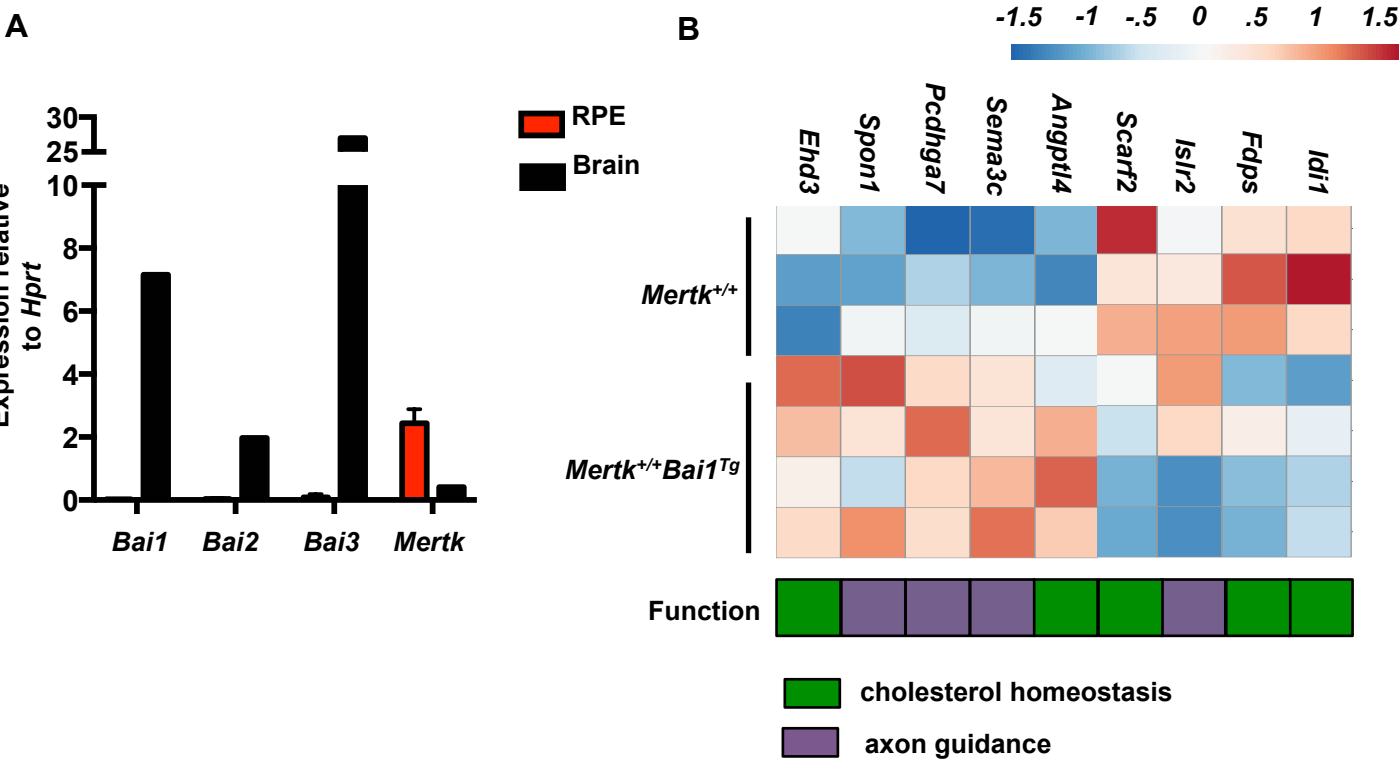
## Figure S1: Testicular cross sections



### Figure S1: Testicular cross sections

Representative scans of testicular cross sections from sham and torsion testes. Scans were magnified 20x and CC3+ cells were counted. Scale bar = 700  $\mu$ m.

**Figure S2: *Bai1<sup>Tg</sup>* influences gene transcription in RPE despite lack of endogenous *Bai1***

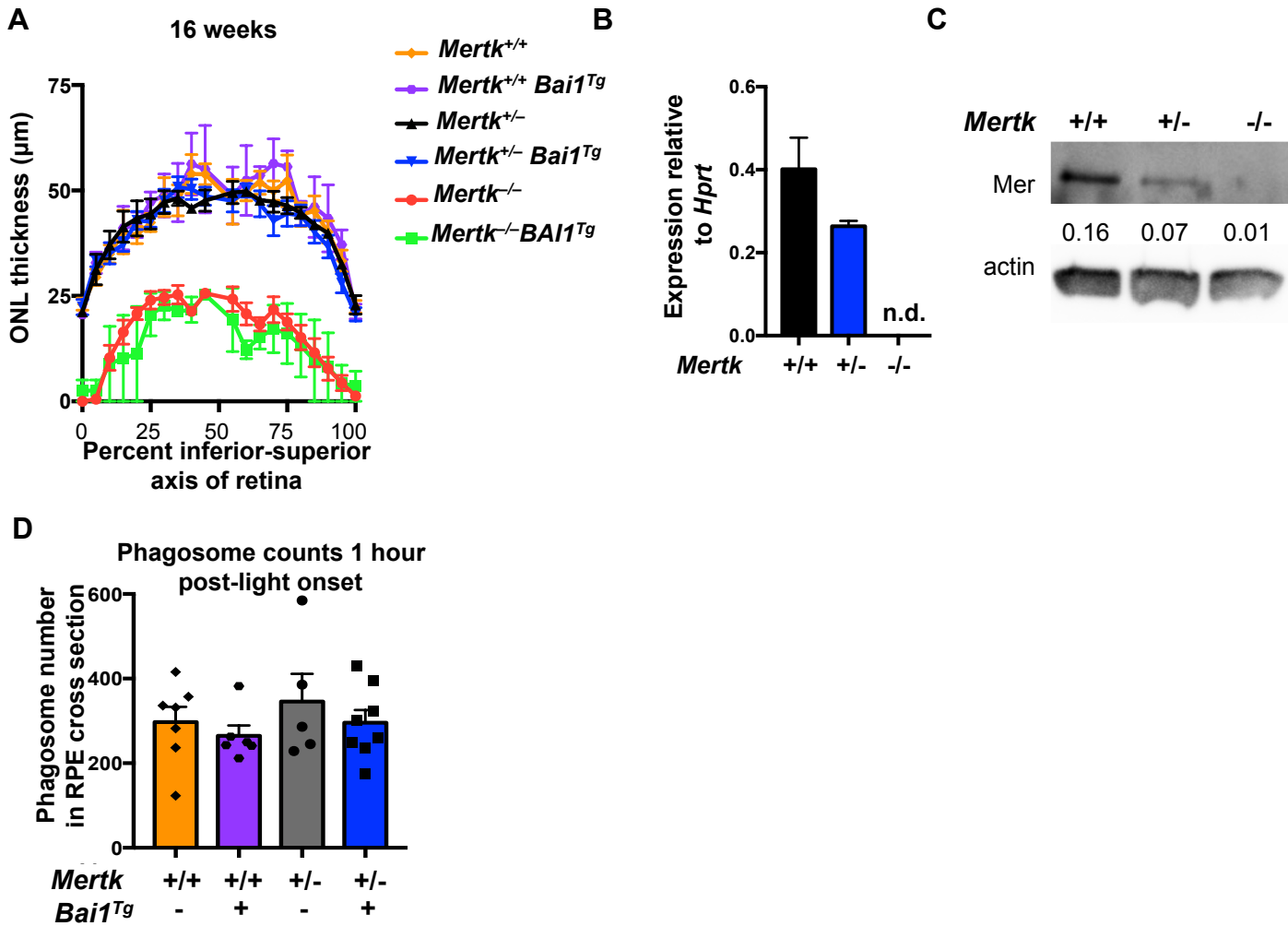


**Figure S2: : *Bai1<sup>Tg</sup>* influences gene transcription in RPE despite the lack of endogenous *Bai1***

a) RPE expression of *Bai1*, *Bai2* and *Bai3* was assessed by quantitative RT-PCR in *Mertk<sup>+/+</sup>* mice (n=2). *Mertk* expression was also evaluated for comparison. Cortex was used as a positive control for *Bai* family expression.

b) RNAseq was performed on *Mertk<sup>+/+</sup>* and *Mertk<sup>+/+</sup>Bai1<sup>Tg</sup>* RPE. Genes related to different BAI1 functions were annotated in the heatmap and annotated gene function is noted on the right.

**Figure S3: *Mertk*<sup>+/+</sup> and *Mertk*<sup>+/-</sup> mice display no phenotypic differences in retinal degeneration and phagocytosis**



**Figure S3: *Mertk*<sup>+/+</sup> and *Mertk*<sup>+/-</sup> mice display no phenotypic differences in retinal degeneration and phagocytosis**

**a)** ONL thickness was measured in *Mertk*<sup>+/+</sup> (n=3), *Mertk*<sup>+/+</sup>*Bai1*<sup>Tg</sup> (n=2), *Mertk*<sup>+/-</sup> (n=4), *Mertk*<sup>+/-</sup>*Bai1*<sup>Tg</sup> (n=7), *Mertk*<sup>-/-</sup> (n=4) and *Mertk*<sup>-/-</sup>*Bai1*<sup>Tg</sup> (n=2) mice at 4 months of age.

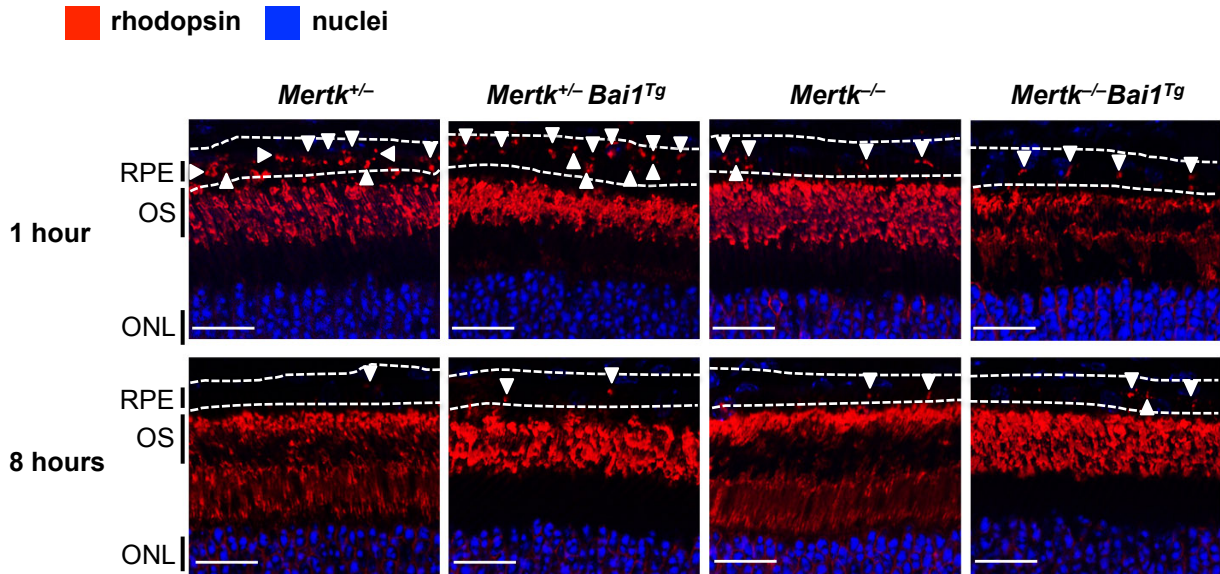
**b)** *Mertk* expression in the RPE of *Mertk*<sup>+/+</sup> (n=2), *Mertk*<sup>+/-</sup> (n=2) and *Mertk*<sup>-/-</sup> (n=2) mice was evaluated by quantitative RT-PCR and

**c)** immunoblotting. Immunoblot shown is representative of 2 experiments.

**d)** Eyes from P17-P21 *Mertk*<sup>+/+</sup>, *Mertk*<sup>+/+</sup>*Bai1*<sup>Tg</sup>, *Mertk*<sup>+/-</sup>, *Mertk*<sup>+/-</sup>*Bai1*<sup>Tg</sup> mice were isolated at 1 h after light onset. Eyes were sectioned and stained for rhodopsin. Rhodopsin puncta in the RPE, referred to as phagosomes, were quantified by automated particle count in ImageJ. Symbols within the bars represent the average particle count from the left and right eyes of one mouse.



## Figure S4: Bai1<sup>Tg</sup> does not influence apical-basolateral localization of phagosomes

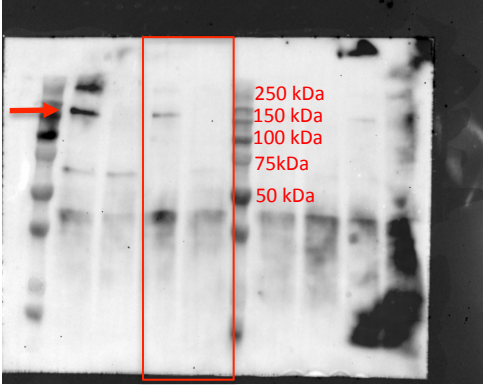


### Figure S4: BAI1<sup>Tg</sup> does not influence apical-basolateral localization of phagosomes

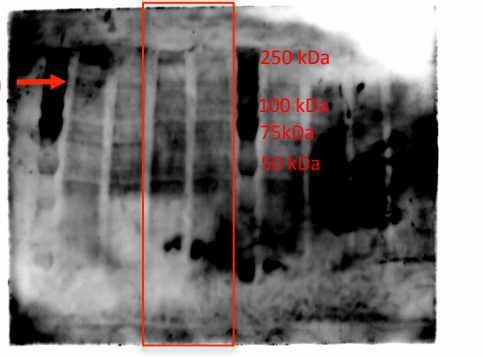
Eye cups isolated at 1 hour and 8 h after light onset were stained for rhodopsin and nuclei. Entire eye cups were imaged at 40x and phagosome localization was compared. Representative images from the central retina are shown. Dotted lines indicate RPE boundaries. White scale bars are 20 $\mu$ M. Rhodopsin punctae are indicated by white arrowheads.

Figure 2B

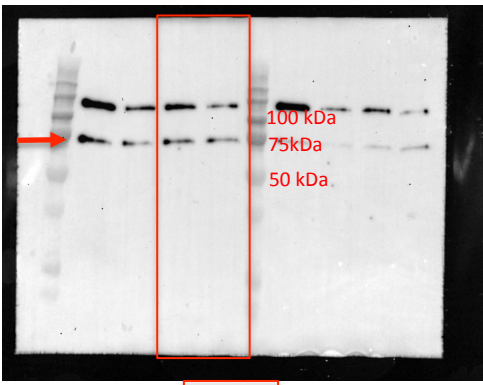
MerTK



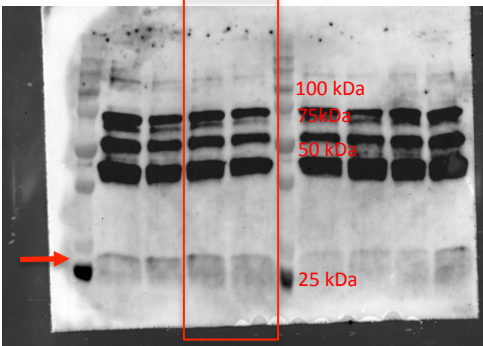
Dock180



ELMO2



Rac



actin

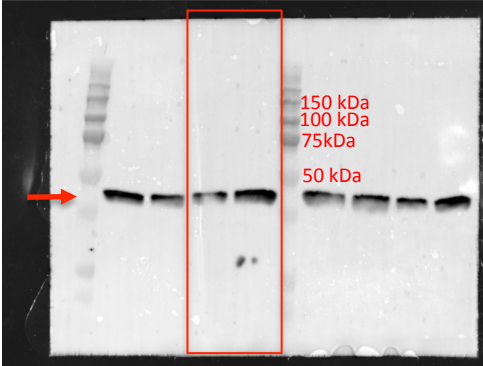


Figure 2F

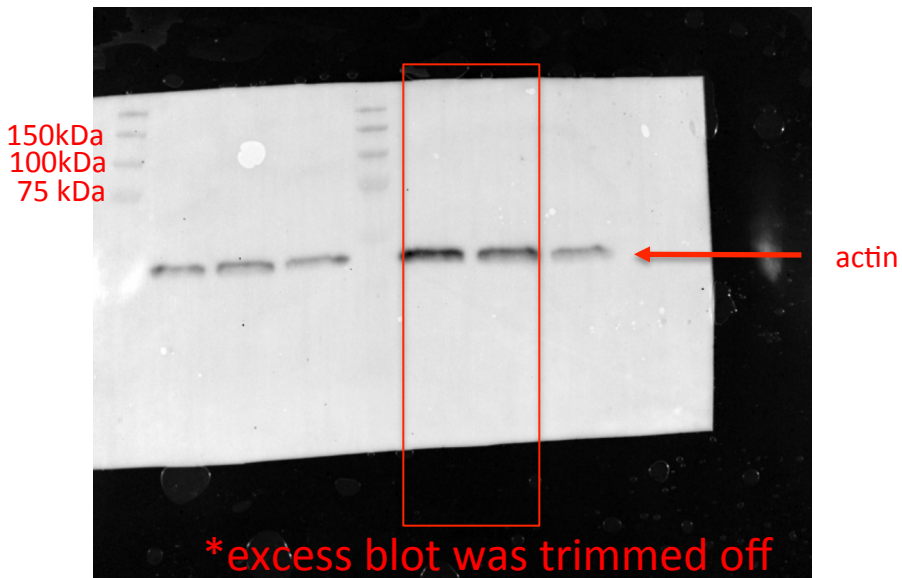
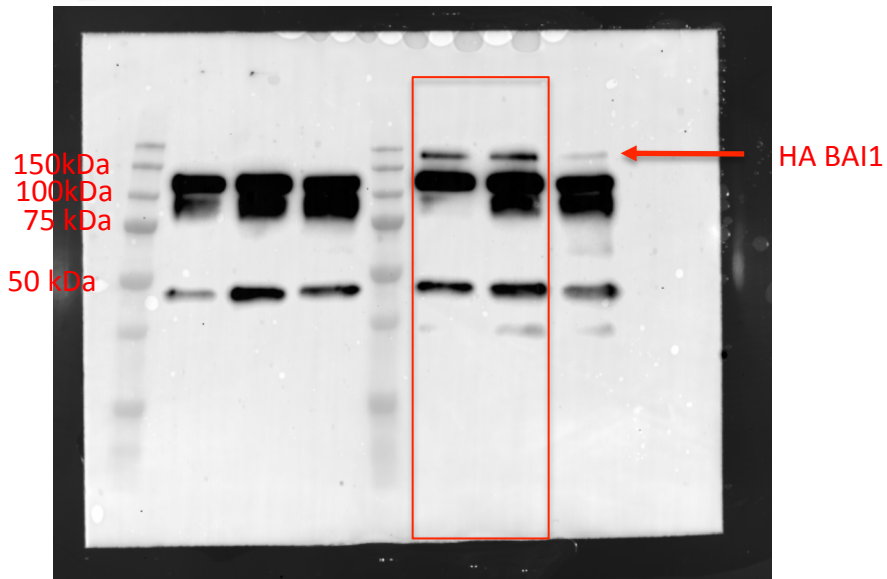
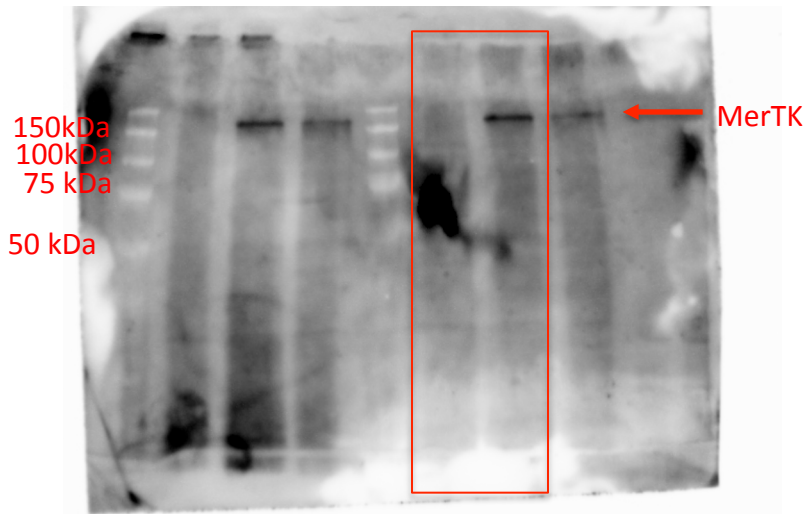


Figure S3B

