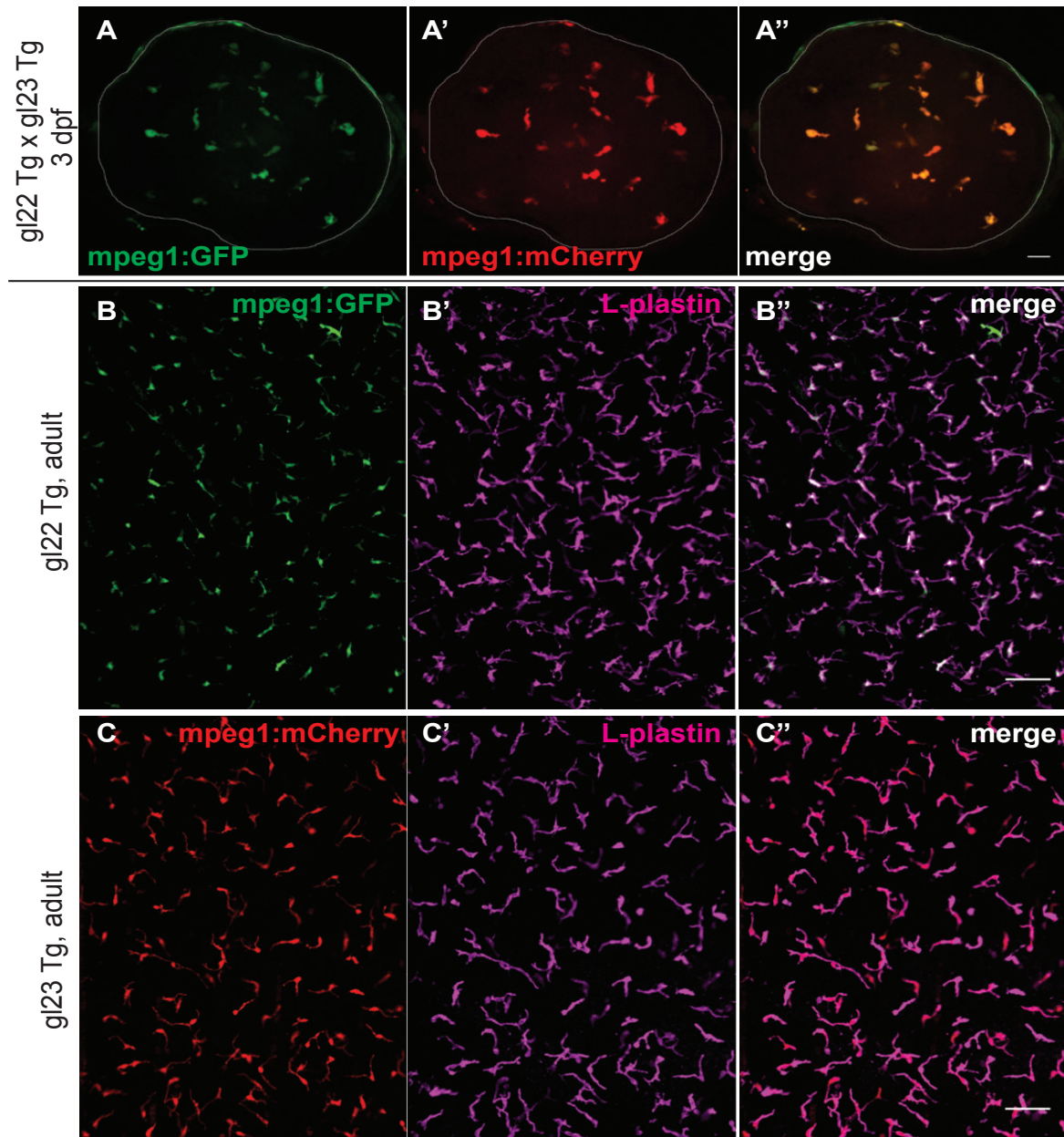


Supporting Information

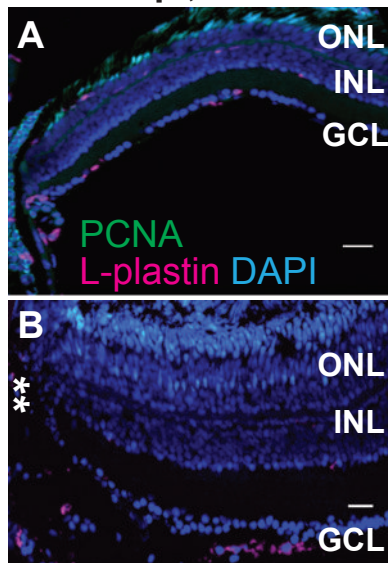
Supplementary Figure 1



A-A''. To assess co-label of *mpeg1:GFP* and *mpeg1:mCherry* transgenes in retinal tissue, embryos were obtained from a cross of gl22 Tg x gl23 Tg fish. At 3 days post-fertilization (3 dpf), embryos were screened for expression of both *mpeg1:GFP* and *mpeg1:mCherry* transgenes. Embryos were fixed, washed, and eyes removed then mounted for imaging. A z series (5 micron step size) was obtained. Images show selected z-projections from whole eyes, with white lines indicating the eye boundary. A. *mpeg1:GFP* signal. A'. *mpeg1:mCherry* signal. A''. Merge to show colabel. Scale bar in A'' = 20 microns. Whole retinas from adult *mpeg1:GFP* (gl22 Tg) and *mpeg1:mCherry* (gl23 Tg) were stained for L-plastin. Images show expression of each individual transgene (B, *mpeg1:GFP*, green or C, *mpeg1:mCherry*, red) with L-plastin stain (magenta, B' and C'). In both transgenic lines, essentially all transgene signal coincides with L-plastin (B'' and C''). Scale bars in B'' and C'' = 100 microns.

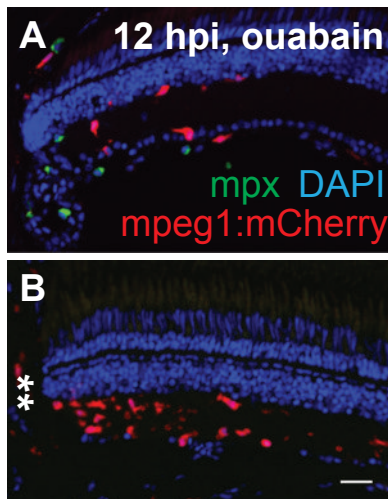
Supplementary Figure 2

12 hpi, saline



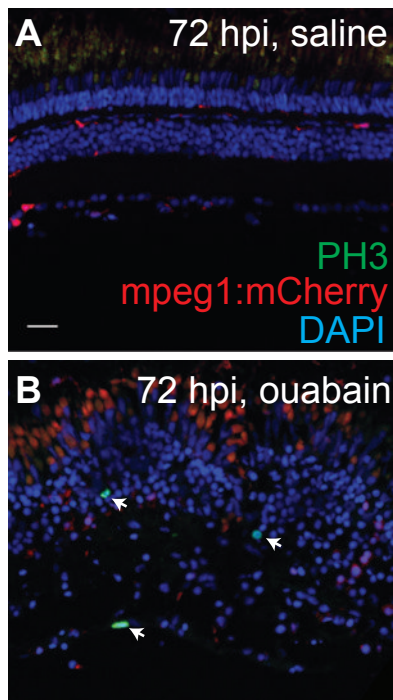
Images show retinal cryosections corresponding to peripheral (A) or central regions (B), adjacent to the optic nerve head (denoted by **) at 12 hours post injection (12 hpi) of saline. Cryosections were stained for PCNA (green), L-plastin (magenta), and DAPI (blue). Saline injection did not induce substantial PCNA expression at 12 hpi. Scale bar in B = 20 microns and applies to both images.

Supplementary Figure 3



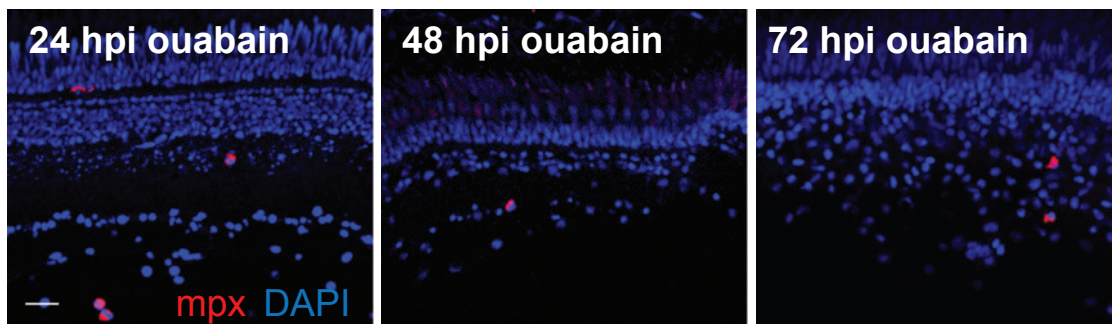
Images show retinal cryosections corresponding to peripheral (A) or central regions (B, adjacent to the optic nerve head, denoted by **) at 12 hours post injection (12 hpi) of ouabain. Cryosections from *mpeg1:mCherry* transgenic fish were stained for mpx (green) and DAPI (blue). Few neutrophils can be seen in peripheral regions. Scale bar in B = 20 microns and applies to both images.

Supplementary Figure 4



Images show retinal cryosections from *mpeg1:mCherry* fish following intravitreal saline (A) or ouabain (B) injection at 72 hours post injection (hpi). Cryosections were labeled with anti-phosphorylated histone 3 (PH3, green) and DAPI (blue). Arrows indicate PH3+ nuclei. Red signal in the outer retina is autofluorescence from photoreceptors. Scale bar in A = 20 microns and applies to A and B.

Supplementary Figure 5



Images show retinal cryosections from zebrafish following intravitreal injection of ouabain, at 24, 48, and 72 hours post injection (hpi). Cryosections were labeled with the neutrophil specific *mpx* antibody (red) and DAPI (blue). Scale bar = 20 microns and applies to all images.