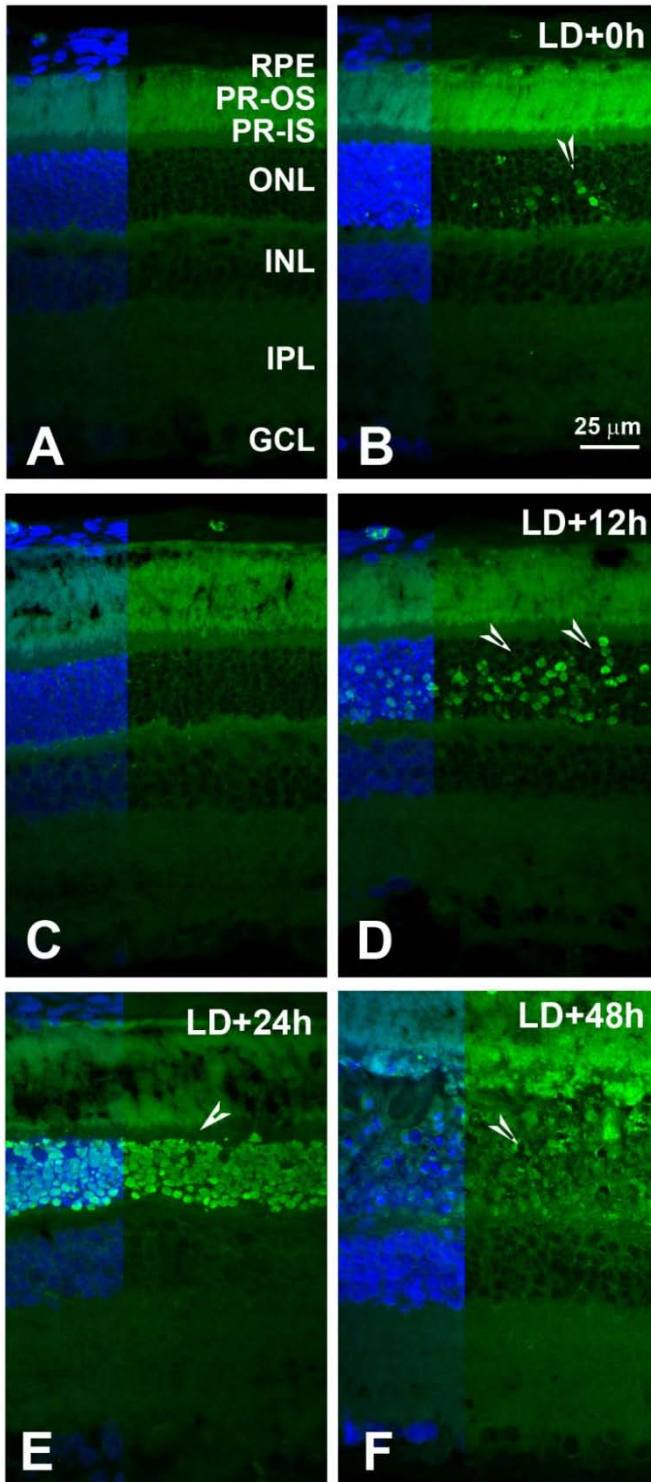


**Figure S1. Apoptosis detection by TUNEL assay.** Frozen sections of rat retina harvested at



different time points after light-damage (LD) were used for the assay along with no light-damaged controls. Fluorescent labeling on the sections were imaged by confocal microscopy and presented the region of superior central retina, which receive maximum impact of the damaging light. No signal was detected in the non-light-damaged retina using FITC-tagged dUTP (data not shown). We detected nick-translation in all LD samples (arrow-heads). At '0' h after LD only few ONL nuclei in the central superior retina showed positive reaction (Fig. B); significantly higher numbers were found at LD+12 h (Fig. D) and at 24 h almost all the ONL nuclei were TUNEL positive (Fig. E). Figures A and C are similar to figures B and D, respectively, without terminal transferase enzyme, served as controls. At 48 hours the ONL is mostly disintegrated (Fig. F, arrow-heads). We note that the photoreceptor outer segments display typical autofluorescence. RPE, retinal pigment epithelium; PR, photoreceptors; OS, outer segments; IS, inner segments; ONL, outer nuclear layer; INL, inner nuclear layer; IPL, inner

plexiform layer; GCL, ganglion cell layer.