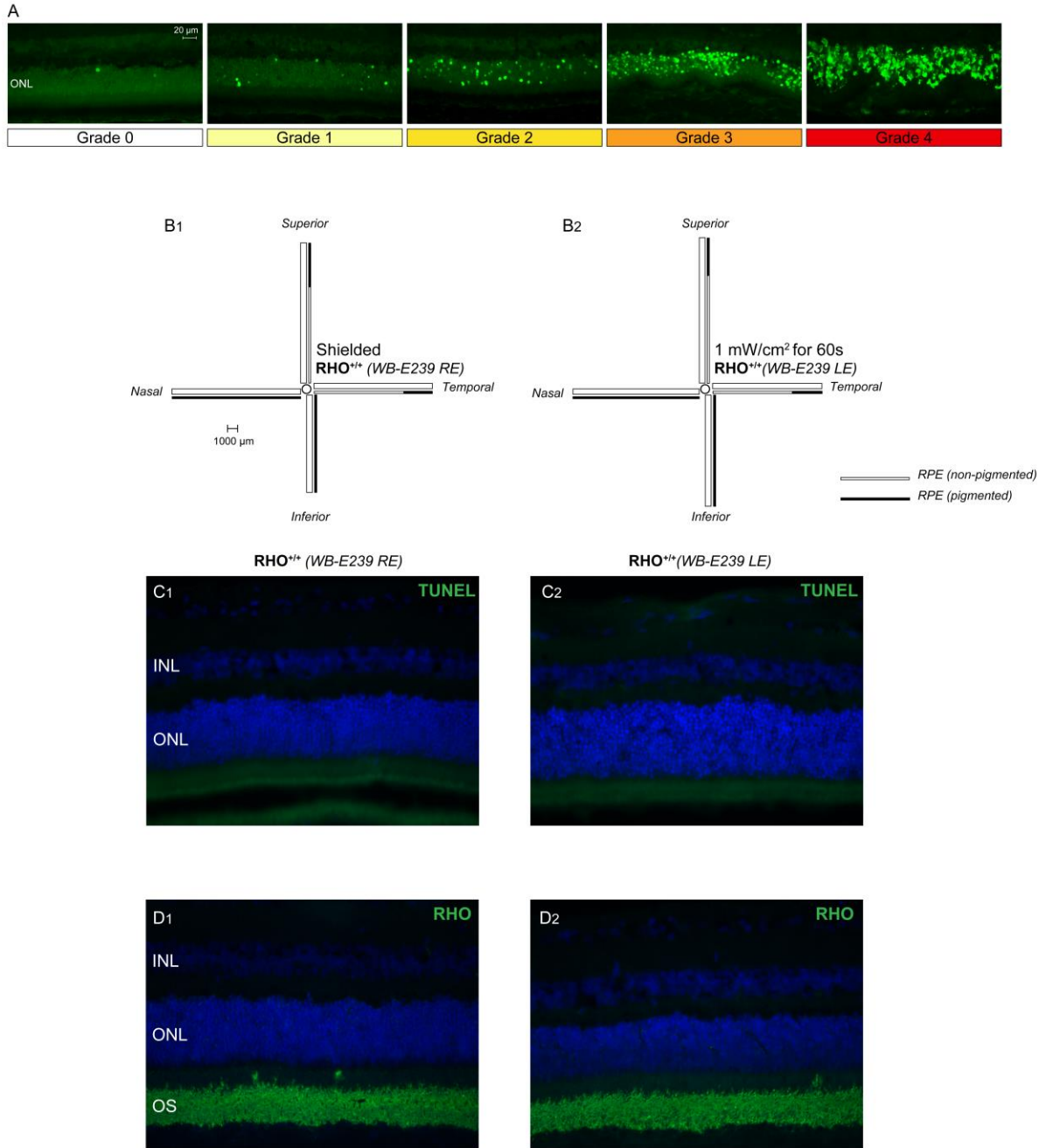


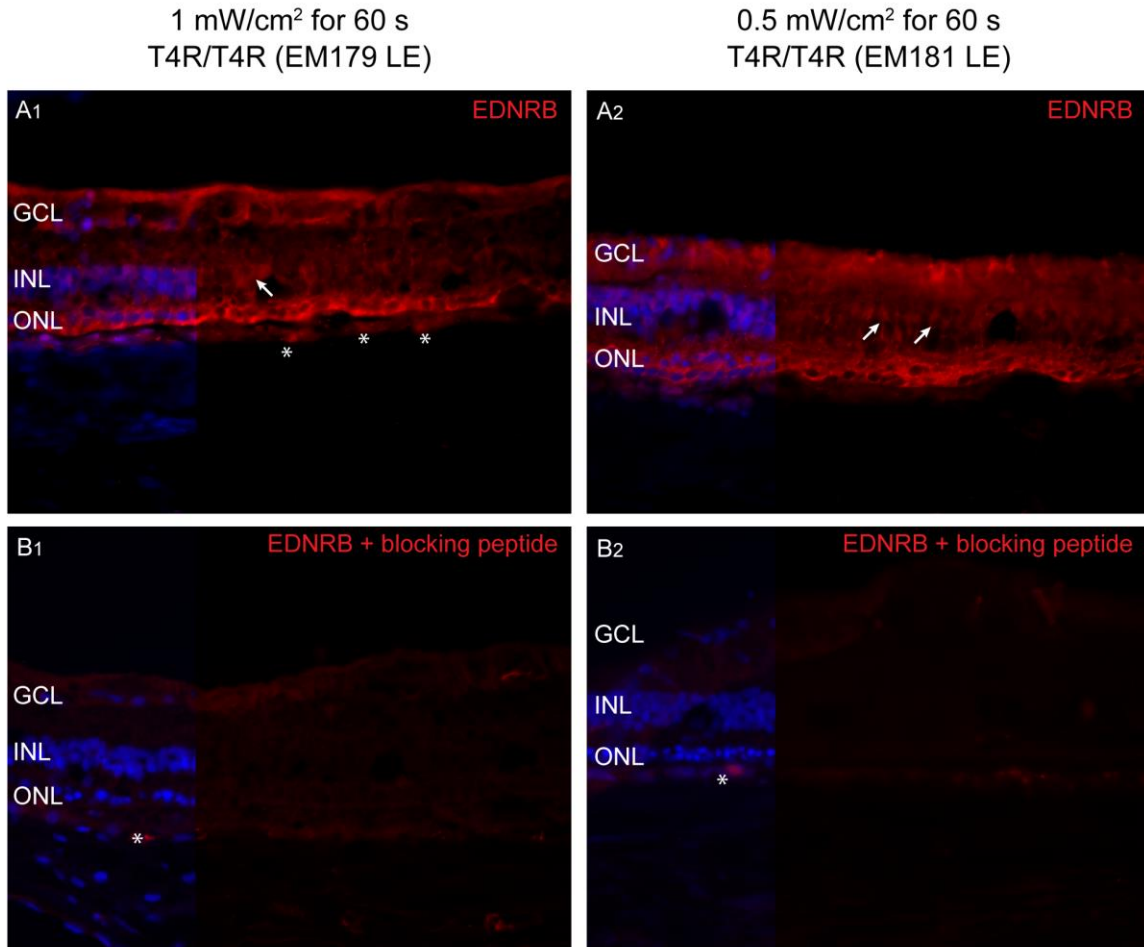
Supplementary Fig 1



**Supplementary figure 1: Lack of cell death and normal rhodopsin immunostaining 24 hours after light exposure in a  $RHO^{+/+}$  dog. A)** Grading system used to map the incidence of TUNEL-positive cells in the outer nuclear layer. **B1-2)** Schematic

representation of grades of TUNEL-labeling along retinal sections extending from the edge of the optic nerve head to the superior, inferior, nasal, and temporal *ora serrata* comparing **B<sub>1</sub>**) shielded and **B<sub>2</sub>**) light exposed (1 mW/cm<sup>2</sup> for 1 min) retina. TUNEL labeled nuclei are not present in any of the 4 quadrants examined in normal eyes following light exposure; **C<sub>1-2</sub>**) TUNEL-labeling **D<sub>1-2</sub>**) Rhodopsin immunostaining. RE: right eye; LE: left eye; INL: inner nuclear layer; ONL: outer nuclear layer; OS: outer segments.

Supplementary Fig 2



**Supplementary figure 2: Endothelin receptor B (EdnRB) immunostaining in RHO T4R dogs 2 weeks after light exposure exposure. A<sub>1-2</sub>) EdnRB staining in light exposed retina. B<sub>1-2</sub>) Lack of EdnRB staining after incubation with blocking peptide. Arrowheads point to Muller cells, asterisks indicate autofluorescence from RPE cells. LE: left eye; GCL: ganglion cell layer; INL: inner nuclear layer; ONL: outer nuclear layer.**