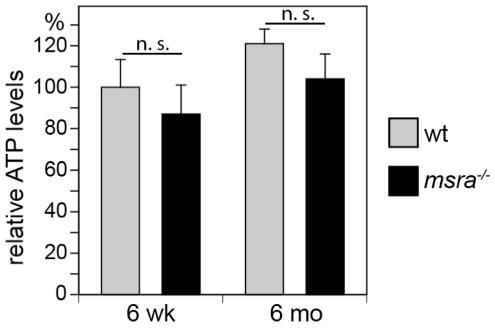
SUPPLEMENTAL MATERIAL

Mazzoni et al.

Lack of the antioxidant enzyme methionine sulfoxide reductase A in mice impairs RPE phagocytosis and causes photoreceptor cone dysfunction

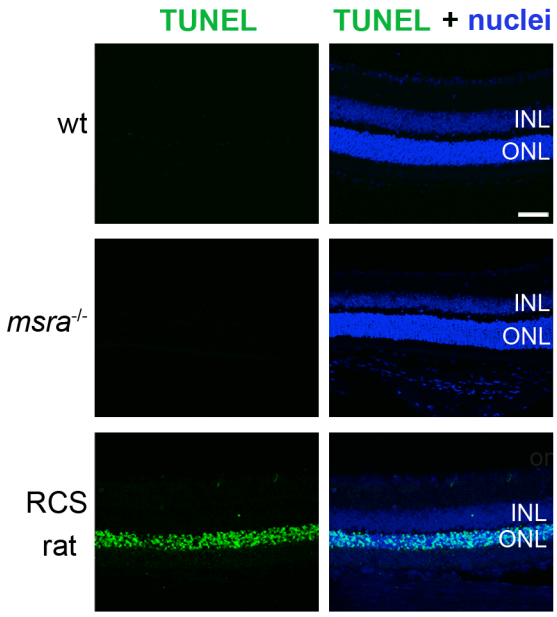
Supplemental Table S1.

target protein	use	dilution used	catalog #, supplier
α-tubulin	WB	1:2000	9099, Cell Signaling, Danvers, MA
calretinin	IF and WB	1:500/ 1:2000	AB5054, Millipore-Sigma
cone arrestin	IF and WB	1:300/1:12000	AB15282, Millipore-Sigma
cytochrome C	WB	1:500	11940, Cell Signaling
L/M-opsin	IF and WB	1:250/1:2000	AB5405, Millipore-Sigma
MsrA	WB	1:5000	H00004482-D01P, Novusbio, Centennial, CO
Total OXPHOS rodent WB antibody cocktail	WB	1:1000	Ab110413, Abcam, Cambridge, MA
OXPHOS complex-I (NDUFB8)	WB	1:1000	Ab110242, Abcam
PKC-α	IF and WB	1:1000/ 1:10000	P4334, Millipore-Sigma
porin	WB	1:2000	4866, Cell Signaling
PSD95	WB	1:5000	MAB1598, Millipore-Sigma
rhodopsin (B6-30)	IF and WB	1:250/ 1:500	NBP2-25160, Novusbio
RPE65	WB	1:2000	103472, Genetex, Irvine, CA
S-opsin	IF and WB	1:250/ 1:2000	AB5407, Millipore-Sigma

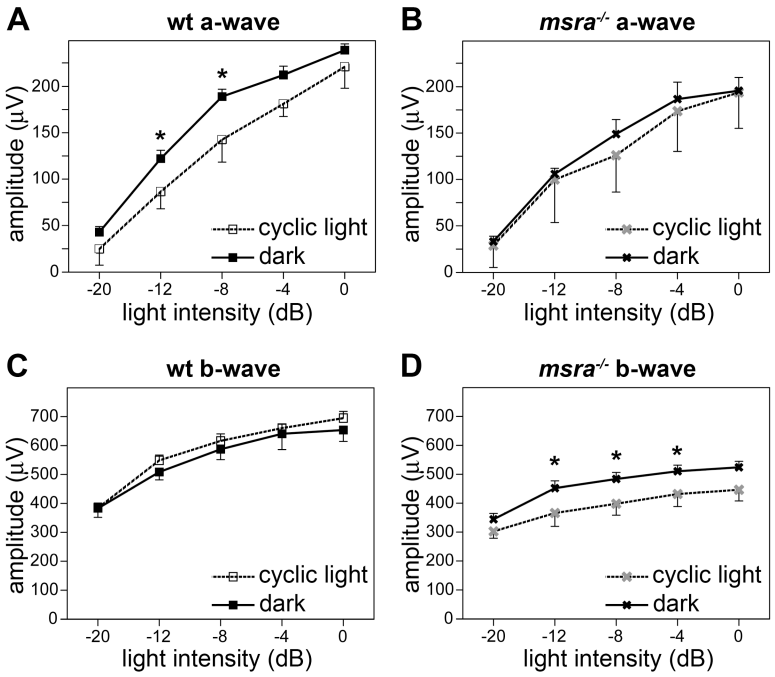


Supplemental Figure S1.

Similar ATP levels in wt and *msra*$^{-/-}$ posterior eyecups of 6 week-old and 6 month-old mice. ATP levels were quantified side-by-side in posterior eyecups following removal of the anterior segment and the neural retina. Bars show mean ± s. e. m., n = 3 samples of 3 individual 6 week-old old 6-month old mice as indicated. Values are shown relative to ATP levels in eyecups of 6-week-old wt mice, which was set as 100%.



Supplemental Figure S2.
No evidence of apoptotic cell death in *msra*$^{-/-}$ retina. Representative micrographs are shown of retinal sections obtained from 6-week old at or *msra*$^{-/-}$ mice as indicated stained with the TUNEL assay. As positive control, retina tissue of degenerating 4-week-old RCS rat retina was processed in parallel. Scale bar, 50 μm.



Supplemental Figure S3.
Side-by-side comparison of mice raised to 6 weeks of age in either complete darkness (solid lines) or in cyclic light (dotted lines) shows modest increase in scotopic ERG a-wave amplitudes in wt (A) but not *msra*$^{-/-}$ mice (B), and in scotopic b-wave amplitudes in *msra*$^{-/-}$ (D) but not wt mice (C). Data are shown separated by strain for better clarity. Panels indicate symbols and line legends. Data are compiled from results shown in Figures 4 and 6. Significant differences due to light condition as per ANOVA and Tukey's post-hoc test are indicated by * ($P < 0.05$).