

Supplementary Materials for:

The Absence of FAIM Leads to a Delay in Dark Adaptation and Hampers Arrestin-1 Translocation upon Light Reception in the Retina

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Table S1. Table of primary antibodies for immunofluorescence detection.

<i>Antibody</i>	<i>Supplier information</i>	<i>Immunogen</i>	<i>Dilution</i>
<i>Multi-ubiquitin</i>	Santa Cruz Biotechnology mouse monoclonal antibody Cat# sc-8017	UBB human, mouse, rat	1:2,000
<i>GFAP</i>	Abcam rabbit polyclonal Cat #ab7260	Full-length human recombinant GFAP expressed in bacteria and highly purified	1:2,000
<i>Arrestin-1</i>	Rabbit polyclonal antibody provided by Dr. Ana Méndez	C10C10 epitope (residues 290-297 of bovine arrestin)	1:1,000
<i>Transducin-α</i>	Rabbit polyclonal antibody, provided by Dr. Ana Méndez	Residues 85–103	1:2,000

Table S2. Table of secondary antibodies for immunofluorescence detection.

<i>Antibody</i>	<i>Supplier information</i>	<i>Immunogen</i>	<i>Dilution</i>
<i>Goat Anti-Rabbit IgG (H+L) Antibody, Alexa Fluor 488 Conjugated</i>	Molecular Probes rabbit polyclonal Cat# A-11008	Rabbit (H+L)	IgG 1:600
<i>Goat Anti-Rabbit IgG (H+L) Antibody, Alexa Fluor 594 Conjugated</i>	Molecular Probes rabbit Cat# A-11012	Rabbit (H+L)	IgG 1:600

Table S3. Table of primary antibodies for western blot.

<i>Antibody</i>	<i>Supplier information</i>	<i>Immunogen</i>	<i>MW (kDa)</i>	<i>Dilution</i>
<i>Anti-FAIM</i>	In-house rabbit polyclonal antibody [5]	Recombinant protein corresponding to full-length rat FAIM	21, 23	1:2,000
<i>Arrestin-1</i>	Rabbit polyclonal antibody provided by Dr. Ana Méndez	C10C10 epitope (residues 290-297 of bovine arrestin)	48	1:10,000
<i>Transducin-α</i>	Rabbit polyclonal antibody, provided by Dr. Ana Méndez	Residues 85–103 of transducin- α	40	1:5,000
<i>Anti-α-tubulin</i>	Sigma-Aldrich mouse monoclonal antibody Cat# T5168	B612 clone hybridoma produced by the fusion of mouse myeloma cells and splenocytes from an immunized mouse	50	1:60,000

Table S4. Table of secondary antibodies for western blot.

<i>Antibody</i>	<i>Supplier information</i>	<i>Immunogen</i>	<i>Dilution</i>
<i>Goat anti-Rabbit IgG</i>	Sigma-Aldrich goat Cat# A0545	Purified IgG	rabbit 1:20,000
<i>Rabbit anti-mouse IgG</i>	Sigma-Aldrich rabbit polyclonal antibody Cat# A9044	Purified IgG	mouse 1:20,000

Figure S1.

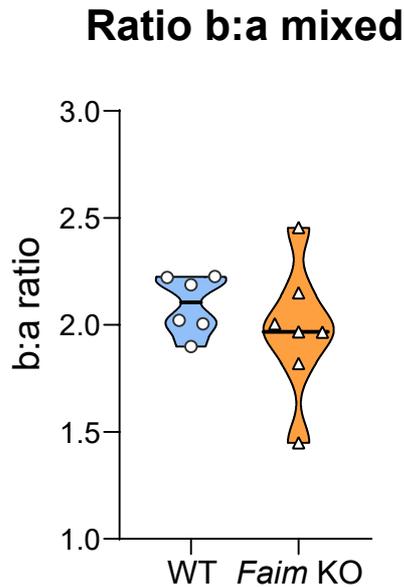


Figure S1. b:a ratio is normal in Faim KO mice at 18 months. Ratio of mixed b-and a-wave at 1.5 log cd·s/m². Data are represented as violin plots. Each dot corresponds to a retina, the median is represented by a thick dashed line, and quartiles are represented by thin dotted lines Student's t test statistics, $p = 0.3949$.

Figure S2.

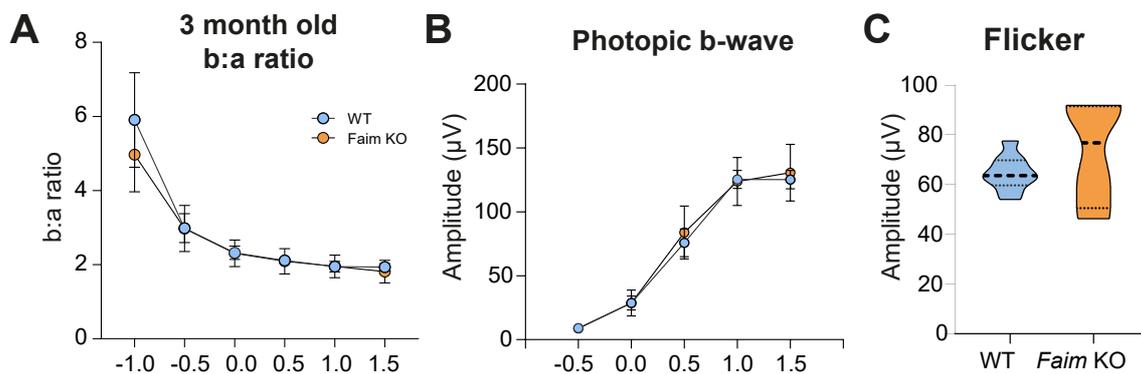


Figure S2. ERG data of WT and Faim KO mice at 3 months of age (A) Mixed b:a ratio is normal in Faim KO mice at 3 months of age at 1.5 log cd·s/m². **(B)** Amplitudes of ERG recordings in photopic conditions under different light intensities. **(C)** Flicker ERG amplitude at 20 Hz. Data are represented as XY graphs and violin plots.

Figure S3.

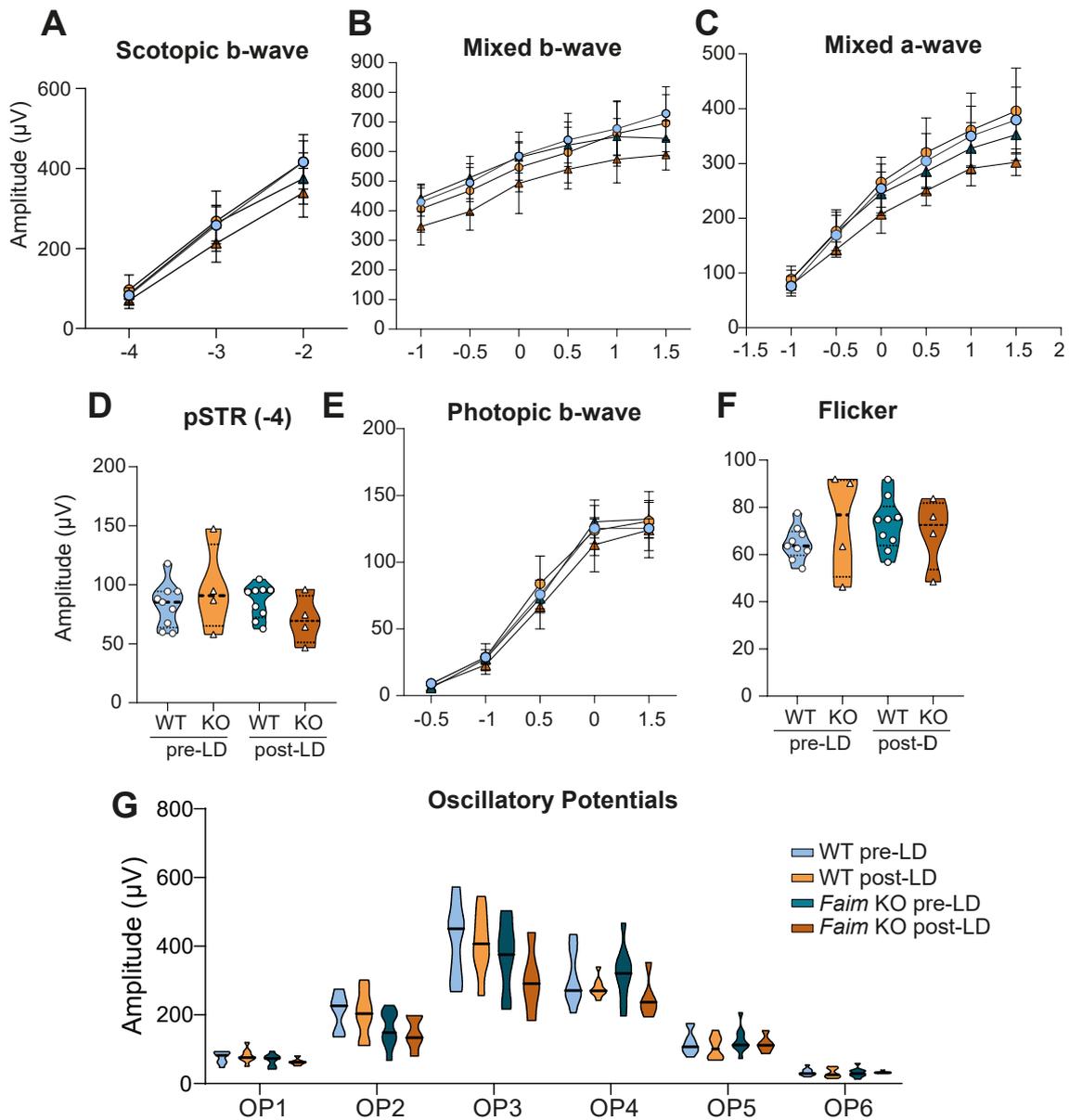


Figure S3. No changes were found in ERG analysis in 2-month-old Faim KO mice after light damage. ERG was performed at the indicated light intensities, corresponding to scotopic (A), mixed (B, C) and photopic (E) conditions. pSTR was performed at $-4 \log \text{cd}\cdot\text{s}/\text{m}^2$ (D), and flicker recordings at 20 Hz (F). Oscillatory potential amplitudes are represented in (G). At least 4 animals were analysed per each group. Data are represented as XY graphs or violin plots. In violin plots, each animal is represented as a dot. Each violin plot extends from the min to max values, the median is represented by a thick dashed line, and quartiles are represented by thin dotted lines. Statistical analysis was performed using repeated measures three-way ANOVA, in which genotype, light intensity and light damage were used as factors. * $p < 0.05$.