

Gene-based Therapy in a Mouse Model of Blue Cone Monochromacy

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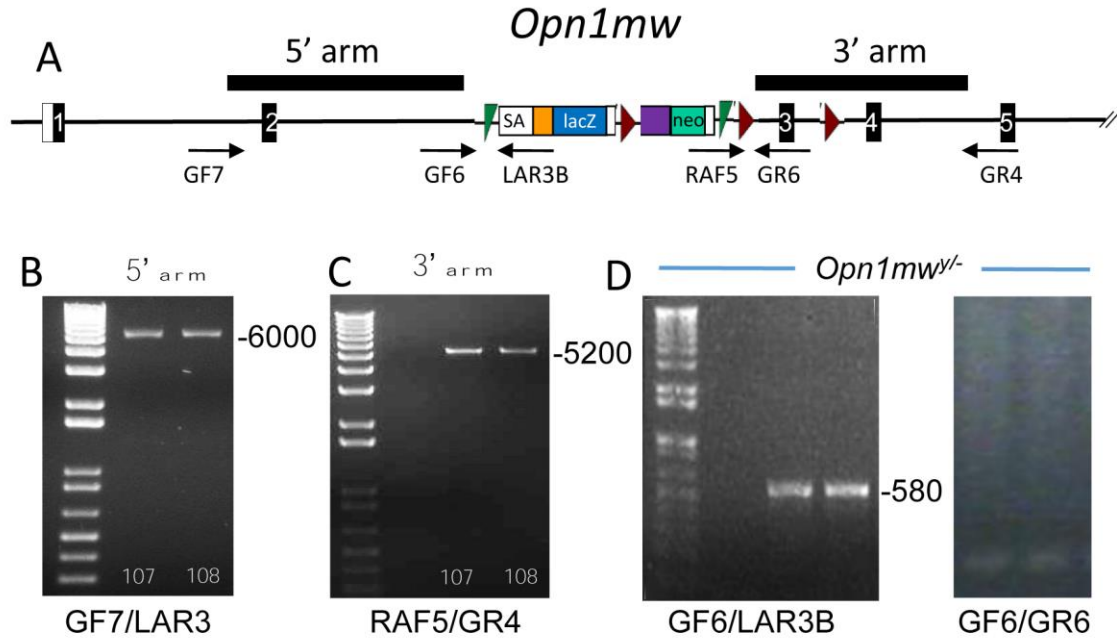
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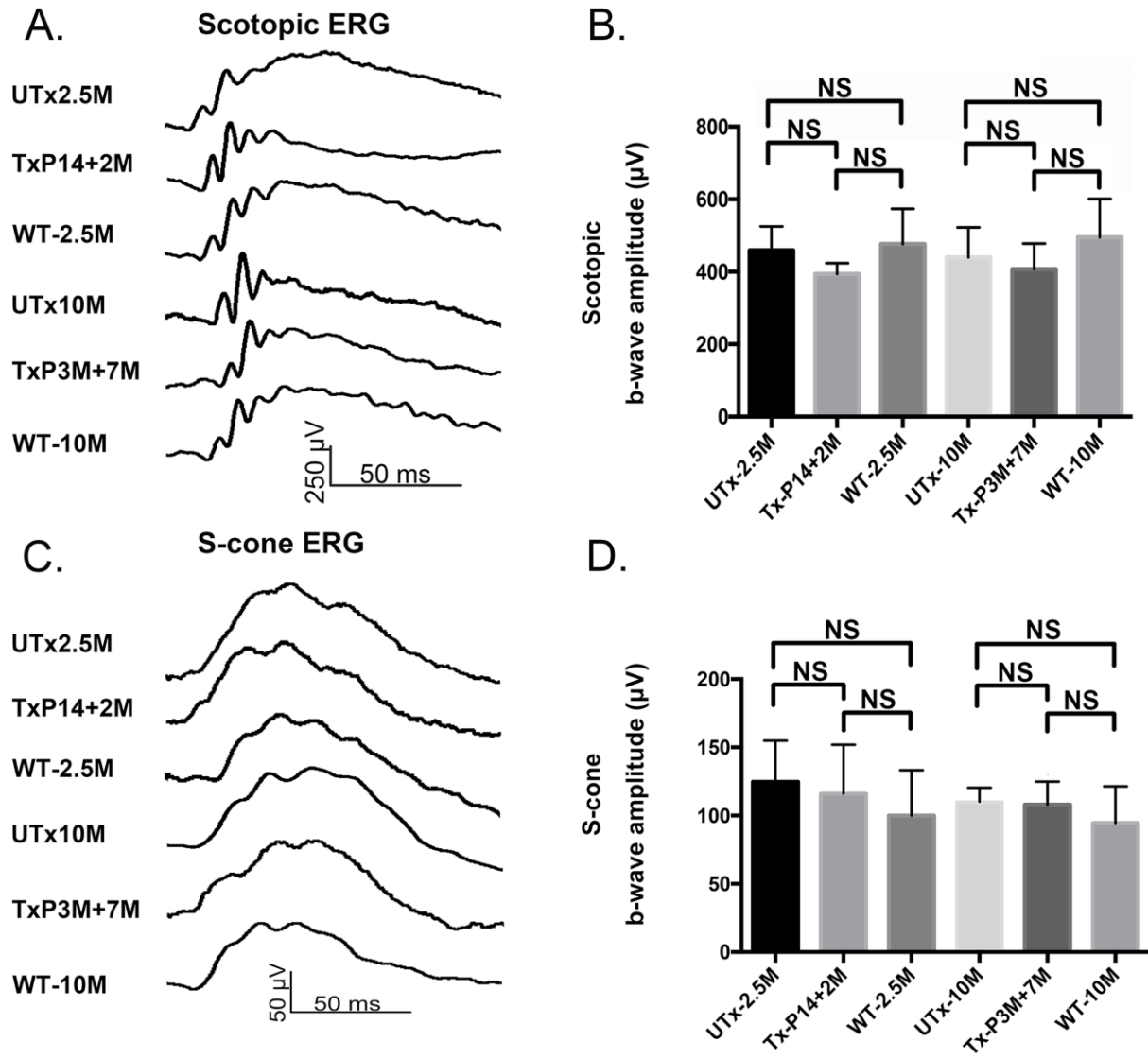
The authors wish it to be known that, in their opinion, the first 3 authors should be regarded as joint First Authors.

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Supplementary Figures and Legends



Supplementary Figure 1. Generation of *Opn1mw* knockout mouse. A, schematic of the *Opn1mw* gene with gene trap inserted into intron 2. Exons 1-5 are marked with black boxes. Approximate sites of 5' and 3' arms are indicated. SA: splice acceptor site; *lacZ*: promoterless β -galactosidase gene. Brown triangles: loxP signals; Green triangles: FRT signals; purple rectangle: SV40 polyA transcription termination; *neo*: neomycin cassette. B&C, verification of the presence of long and short arms in the gene trapped cell line. D, genotyping of an *Opn1mw*^{-/-} mouse.



Supplementary Figure 2. Scotopic and short wavelength photopic ERG responses from untreated 2.5 month old *Opn1mw^{-/-}* mice (UTx2.5M), *Opn1mw^{-/-}* mice treated at P14 with ERG analysis at 2 months post-treatment (TxP14+2M), untreated 2.5-month-old wild type mice (WT-2.5M), untreated 10 month old *Opn1mw^{-/-}* mice (UTx10M), *Opn1mw^{-/-}* mice treated at 3 months of age with ERG analysis at 7 months post-treatment (TxP3M+7M), and untreated 10 month old wild type mice (WT-10M).

(A) Representative rod-mediated scotopic ERG recordings. (B) Average b-wave amplitudes of scotopic ERGs. (C) Representative short wavelength ERG recordings. (D) Average b-wave

amplitudes of short wavelength ERGs. NS: no statistical difference. Data are represented at as mean $\pm$ SD.