

## **Description of Additional Supplementary Files**

File Name: Supplementary Movie 1

Description: Calcium imaging of light responses in population retinal ganglion cells.

File Name: Supplementary Movie 2

Description: Pupillary light reflex to UV light in blind and wild-type mice.

File Name: Supplementary Movie 3

Description: Pupillary light reflex to green light in blind and wild-type mice.