

Supplementary Information

Functional analysis of Samd11, a retinal photoreceptor PRC1 component, in establishing rod photoreceptor identity

Shun Kubo¹, Haruka Yamamoto¹, Naoko Kajimura², Yoshihiro Omori¹, Yamato Maeda¹, Taro Chaya¹, Takahisa Furukawa^{1*}

¹Laboratory for Molecular and Developmental Biology, Institute for Protein Research, Osaka University, Osaka, 565-0871, Japan

²Research Center for Ultrahigh Voltage Electron Microscopy, Osaka University, Osaka, 567-0047, Japan

*Corresponding author: Takahisa Furukawa

E-mail: takahisa.furukawa@protein.osaka-u.ac.jp

Laboratory for Molecular and Developmental Biology, Institute for Protein Research, Osaka

University, 3-2 Yamadaoka, Suita, Osaka, 565-0871, Japan

Phone: +81-6-6879-8631

Fax: +81-6-6879-8633

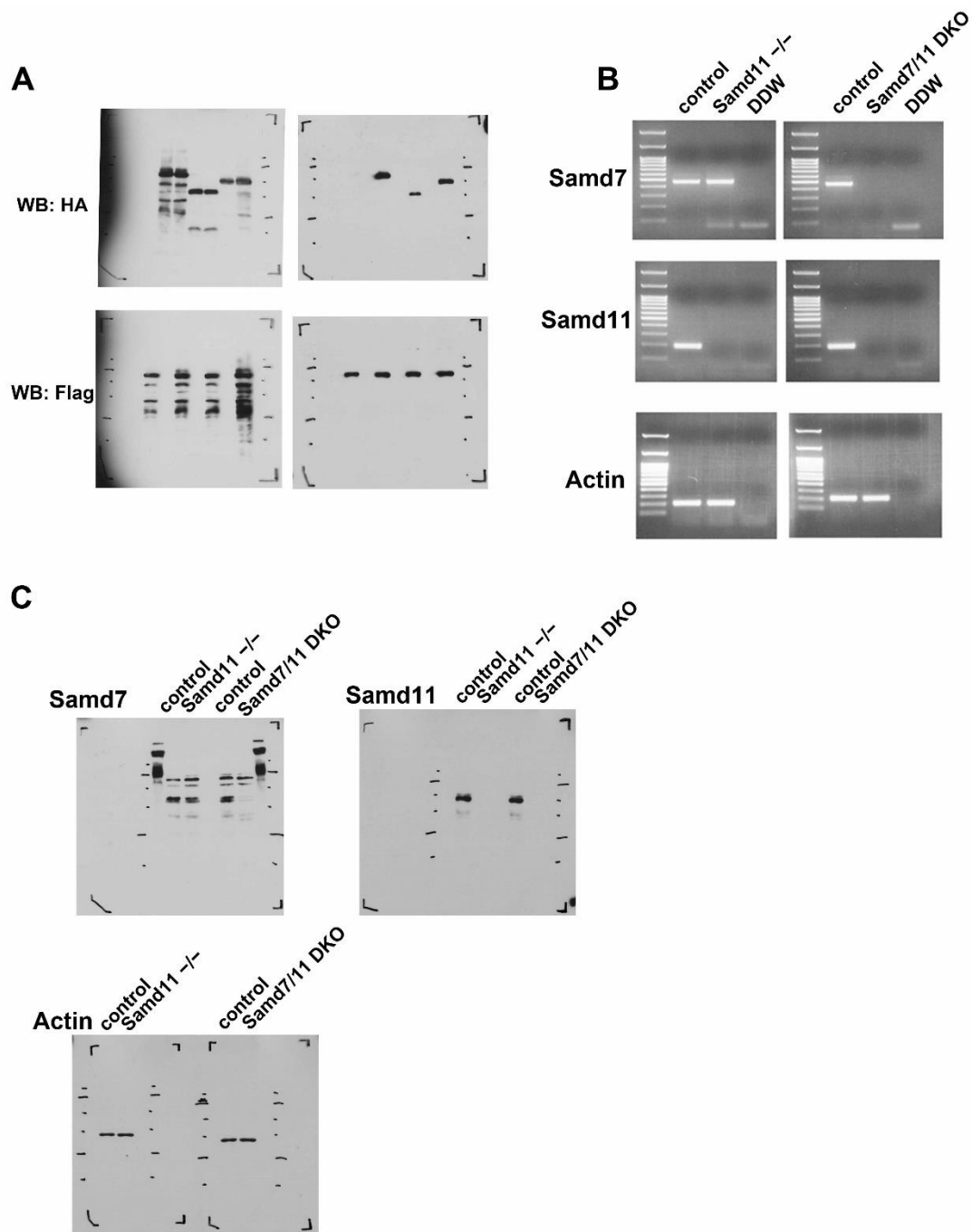


Figure S1. Full images of immunoprecipitation, RT-PCR, and Western blot analyses.

A, Full images of the immunoprecipitation analysis of Samd11/Samd11, Samd11/Phc2, and Samd11/Samd7.

B, Full images of the RT-PCR analysis of Samd7 and Samd11 transcription using intron-spanning primer sets in *Samd11*^{-/-} and *Samd7/11* DKO retinas at P12.

C, Full images of the Western blot analysis of Samd7, Samd11, and Actin proteins in control, *Samd11*^{-/-}, and *Samd7/11* DKO retinas at P12.

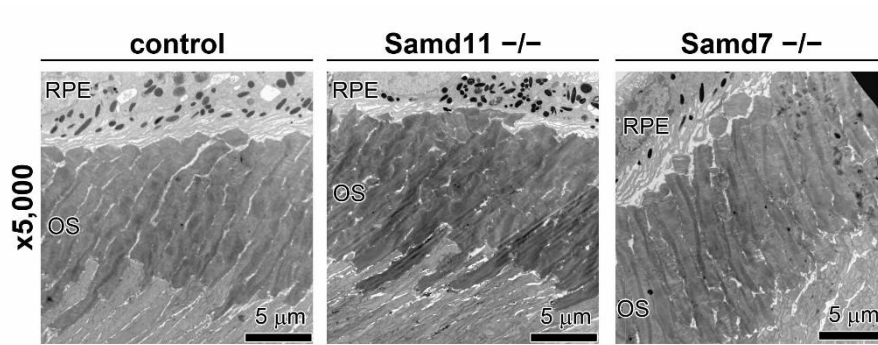


Figure S2. TEM analysis of photoreceptor outer segments.

TEM images of the outer segments in the control, *Samd11*^{-/-}, and *Samd7*^{-/-} retina at the adult stage.

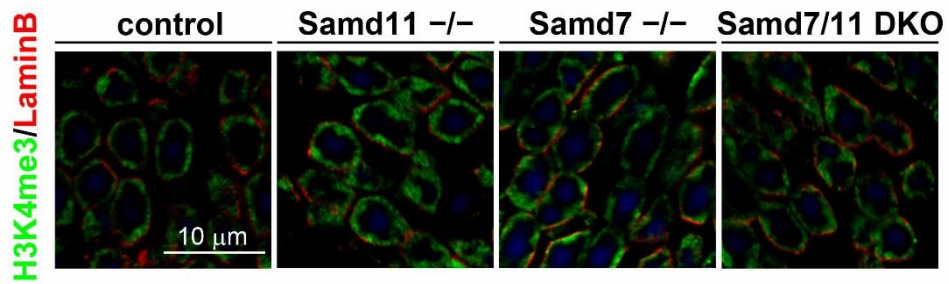


Figure S3. Immunostaining of H3K4me3 and Lamin B in the control, *Samd11*^{-/-}, *Samd7*^{-/-}, and *Samd7/11* DKO photoreceptor cells at the adult stage.

Retinal sections from control, *Samd11*^{-/-}, *Samd7*^{-/-}, and *Samd7/11* DKO mice were immunostained with anti-H3K4me3 (a marker for euchromatin) and anti-Lamin B (a marker for the nuclear membrane) antibodies.