## **Supplementary Information**

## Activation of JNK signaling promotes all-trans retinal-induced photoreceptor apoptosis in mice

Chunyan Liao<sup>1</sup>, Binxiang Cai<sup>1</sup>, Yufeng Feng<sup>2</sup>, Jingmeng Chen<sup>3</sup>, Yiping Wu<sup>1</sup>, Jingbin Zhuang<sup>1</sup>, Zuguo Liu<sup>1</sup>, and Yalin Wu<sup>1,4,5,\*</sup>

<sup>1</sup>Department of Ophthalmology, Xiang'an Hospital of Xiamen University, Fujian Provincial Key Laboratory of Ophthalmology and Visual Science, Eye Institute of Xiamen University, School of Medicine, Xiamen University, Xiamen City, FJ 361102, China

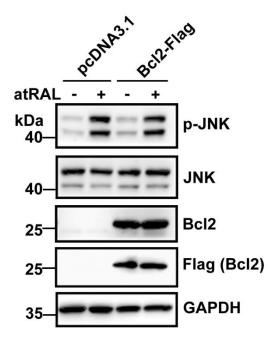
<sup>2</sup>Department of Anesthesiology, the First Affiliated Hospital of Xiamen University, Xiamen City, FJ 361003, China

<sup>1</sup>To whom correspondence should be addressed: Yalin Wu, Xiang'an Hospital of Xiamen University, Eye Institute of Xiamen University, School of Medicine, Xiamen University, Xiang'an South Road, Xiang'an District, Xiamen City, FJ, China; or Xiamen Eye Center of Xiamen University, Wutong West Road, Huli District, Xiamen City, FJ, China; E-mail: <a href="mailto:yalinw@xmu.edu.cn">yalinw@xmu.edu.cn</a>

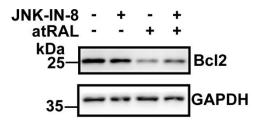
<sup>&</sup>lt;sup>3</sup>School of Medicine, Xiamen University, Xiamen City, FJ 361102, China

<sup>&</sup>lt;sup>4</sup>Xiamen Eye Center of Xiamen University, Xiamen City, FJ 361001, China

<sup>&</sup>lt;sup>5</sup>Shenzhen Research Institute of Xiamen University, Shenzhen City, GD 518063, China



Supplementary Figure S1. Immunoblot analysis of p-JNK, JNK, Bcl2 and Flag (Bcl2) in lysates of Bcl2 over-expressing 661W photoreceptor cells incubated with 5  $\mu$ M atRAL or vehicle (DMSO) alone for 6 h, respectively. Cells transfected with vector pcDNA3.1 served as a control. GAPDH was used as a loading control.



**Supplementary Figure S2.** Western blot analysis of Bcl2 in 661W photoreceptor cells treated with 5  $\mu$ M atRAL for 6 h in the absence or presence of 1  $\mu$ M JNK-specific inhibitor JNK-IN-8. Note that cells were pretreated with 1  $\mu$ M JNK-IN-8 for 1 h. Cells treated with vehicle (DMSO) or JNK-IN-8 served as controls. GAPDH was utilized as an internal control.