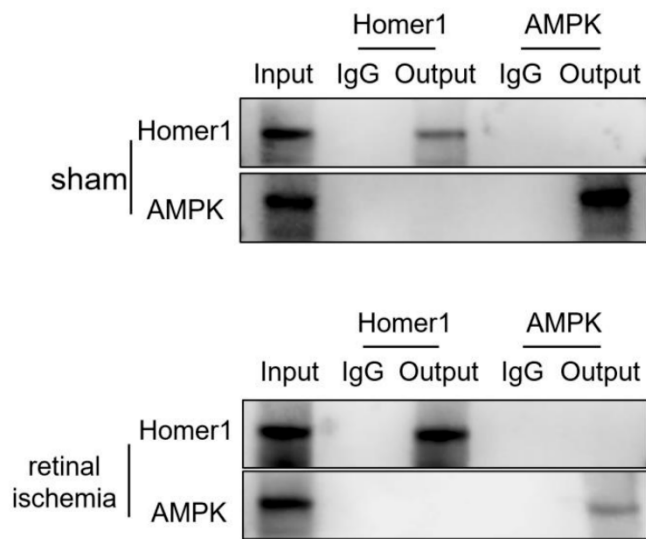


## **Supplement materials**

### **Materials and methods**

#### **Coimmunoprecipitation (Co-IP)**

Retinal tissue is homogenized to extract total protein. For co-IP, lysates of retinal tissue were immunoprecipitated with IP buffer containing IP antibody-coupled Protein A/G PLUS-Agarose beads, and protein-protein complexes were later subjected to western blot. IgG was used as a negative control. The following antibodies were used: rabbit anti-Homer1 (ab184955; 1:60; Abcam), and rabbit anti-AMPK (#2532; 1:100; CST).



Supplement Figure S1: **There is no direct binding between Homer1 and AMPK.** Co-IP assay was conducted to detect the physical bind ability between Homer1 and AMPK in the sham and retinal ischemia group by using anti-Homer1 and AMPK antibodies.