



**Supplementary Figure 1:**

**A.** *iZEG:Cacna1f* transgene plasmid construct was transfected into HEK 293T cells, with and without the *CMV::Cre* driver plasmid. In the presence of the *Cre* driver, the *iZEG:Cacna1f* vector expresses *eGFP* colocalized with a co-transfected *CMV*-driven nuclear *RFP* reporter plasmid. **B.** Mouse retinas were electroporated *in vivo* with *iZEG:Cacna1f* and *Nrl::Cre* plasmids

at P0, and then harvested and imaged at P14.