



**Supplementary Figure 1: Gates for fluorescence activated cell-sorting (FACS) of retinal cells after electroporation.** The sample names are indicated in the respective plots. Left panels represent the gate for viable cells based on front and side scatter. Right panels represent the gates used for sorting. FITC-A positive cells represent cells that were successfully electroporated, while PE-A positive cells represent rod cells. Two populations of cells were sorted for each replicate – FITC-A and PE-A positive (Q2-UR) and FITC-A positive only (Q2-LR). Equal numbers from both populations were mixed for scMPRA experiments.