

## Supplementary Information

Supplement Table S1. Primer sequences for sgRNA cloning and validation.

### Supplement Figure:

**FIGURE S1. (A)** Gene ontology enrichment for HCT-8 for 2 day. **(B)** Gene ontology enrichment for HCT-8 for 4 day.

**FIGURE S2.** The unedited Western Blot images corresponding to Figure 3A

**FIGURE S3.** The unedited Western Blot images corresponding to Figure 3B

**FIGURE S4.** The unedited Western Blot images corresponding to Figure 3C

**FIGURE S5.** The unedited Western Blot images corresponding to Figure 3E

**FIGURE S6.** A and B) Gene ontology enrichment for overexpression of KCNJ4 and KCNJ12 at 4 days.

**FIGURE S7.** The unedited Western Blot images corresponding to Figure 4A for 0 day

**FIGURE S8.** The unedited Western Blot images corresponding to Figure 4A for 2 day

**FIGURE S9.** The unedited Western Blot images corresponding to Figure 4A for 4 day

**FIGURE S10.** A) Schematic of three AAV vector.

**FIGURE S11.** The unedited Western Blot images corresponding to Figure 5A