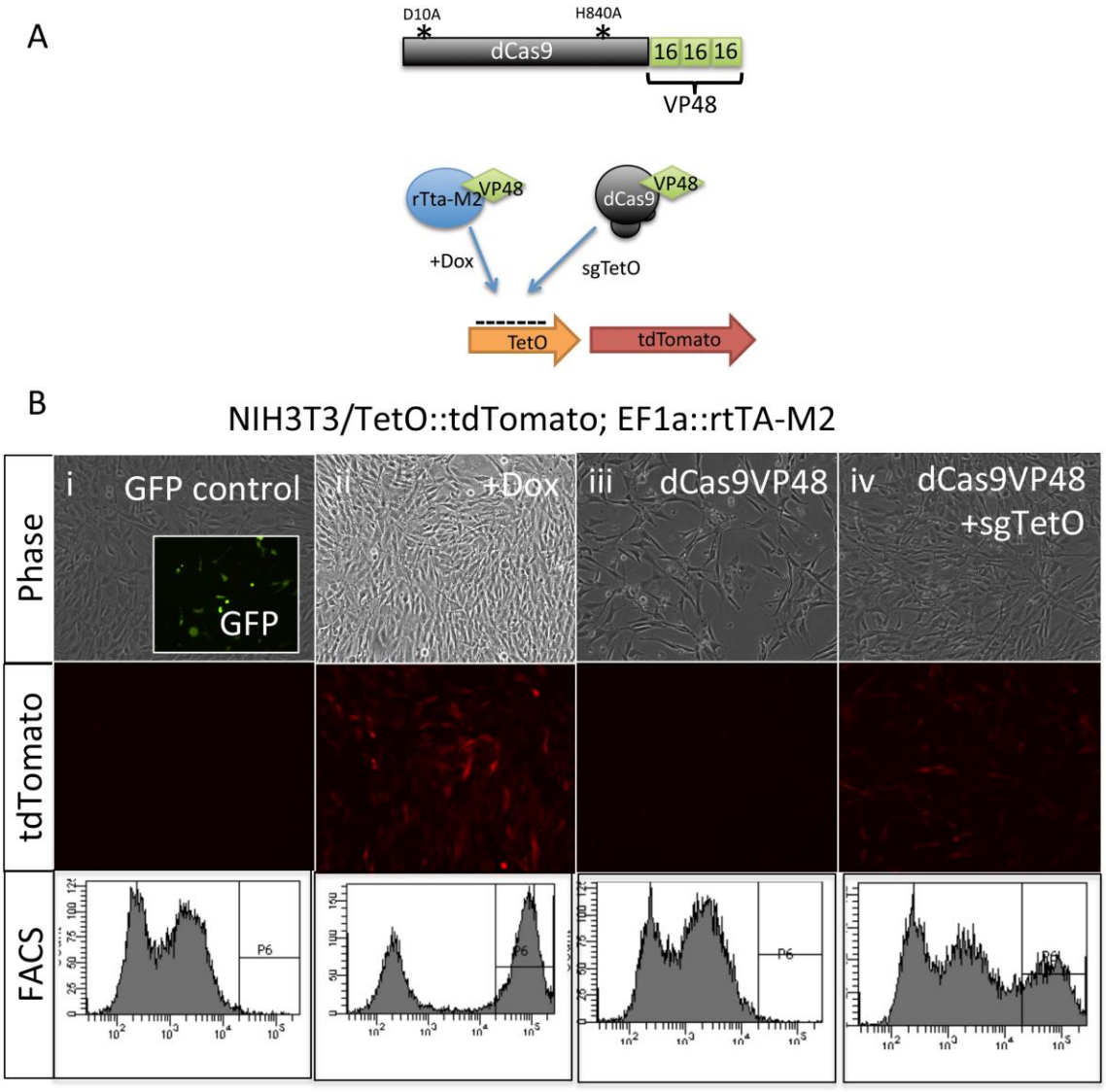

Supplementary information, Figure S2 CRISPR-on activates transgene in mouse cells.

dCas9VP48 guided by sgRNA targeting rtTA binding site activates TetO promoter in NIH3T3/TetO::tdTomato;EF1a::rtTA-M2 cells. (A) Schematic of the dCas9VP48 mediated transgene activation in NIH3T3 cells. dCas9VP48 was generated by fusion of dCas9 to VP48 and then co-transfected with sgRNA complementary to tet binding site in NIH3T3/TetO::tdTomato;EF1a::rtTA-M2 cells. (B) dCas9VP48 depends on sgRNA to bind to the target tetO promoter to activate TetO::tdTomato transgene in NIH3T3 cells. Cells were transfected with the indicated plasmids or sgRNAs and were analyzed by flow cytometry for tdTomato expression 48 hr later.