A systematic screening assay identifies efficient small guide RNAs for CRISPR activation

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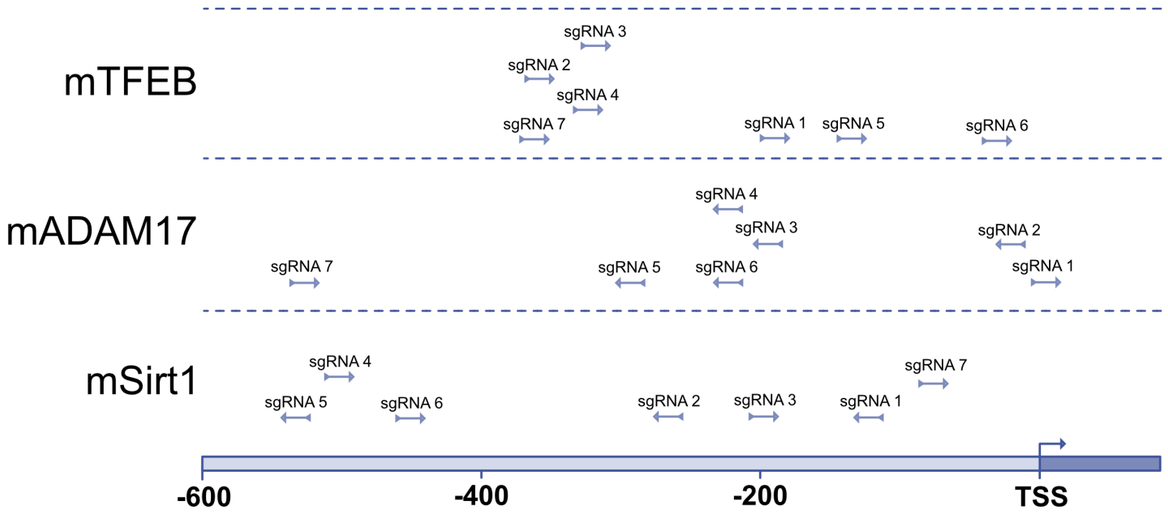
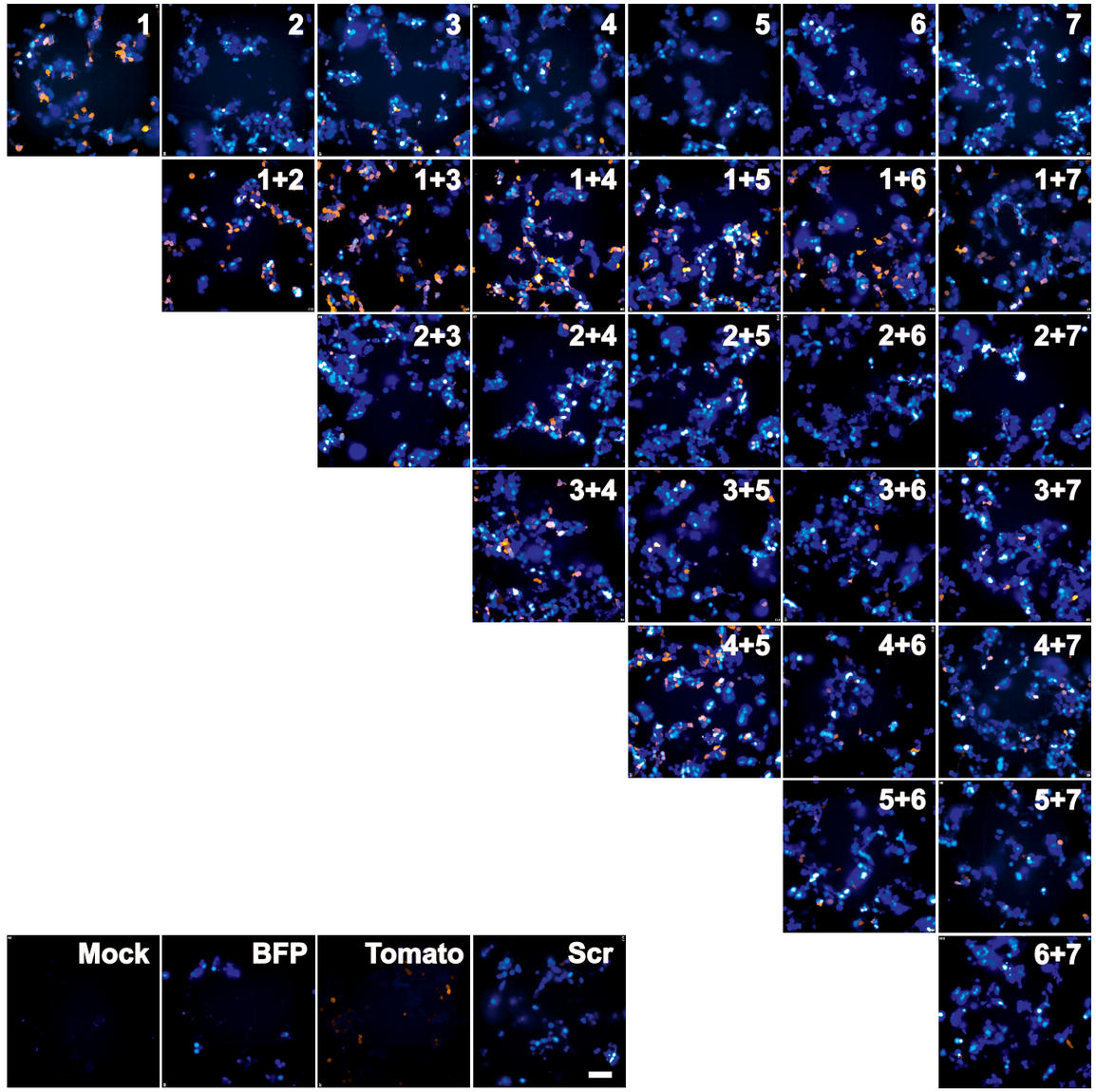
Supplementary Material



Supplementary figure 1: sgRNA sequences relative to transcriptional start site.

sgRNA 1 to 7 for mouse Tfeb, mouse Adam17 and mouse Sirt1 illustrated relative to the transcriptional start site (TSS) for each of their respective genes.



Supplementary figure 2: Fluorescence images of the screening assay using mouse Sirt1.

293T cells were transfected with pDPL0 expressing sgRNA, reporter constructs expressing TdTomato, MiniCas9V2 and BFP. Forty-eight hours after transfection, the cells were fixed and the TdTomato and BFP fluorescence were measured. Each number denotes an sgRNA. Mock - mock transfected cells. BFP - cells transfected with BFP and MiniCas9V2. Tomato - cells transfected with TdTomato reporter and MiniCas9V2. Scr - cells transfected with Scramble sgRNA, MiniCas9V2, TdTomato reporter and BFP. Scale bar -100 µm.