

Title: Supplementary Data 1

Description: crRNA sequences in Figure 1, 2, 4, 5, and 6

Title: Supplementary Data 2

Description: crRNA and gRNA sequences for activation efficiency comparison in Figure 3

Title: Supplementary Data 3

Description: the sequences of customized CRISPR arrays in Figure 5

Title: Supplementary Data 4

Description: crRNA and gRNA sequences for detecting off-target activations in Figure 7

Title: Supplementary Data 5

Description: complete sequences of pCsy1-Csy2, pCsy3-VPR-Csy4, and pCsy-crRNA-EV

Title: Supplementary Data 6

Description: DNA sequences for EMSA assay in Figure 1

Title: Supplementary Data 7

Description: quantitative PCR primers used in this study

Title: Supplementary Data 8

Description: predicted off-target sites in Figure 7