

## **Description of Additional Supplementary Files**

File Name: Supplementary Data 1

Description: Synthesized oligonucleotides and DNA fragments used in this study.

File Name: Supplementary Data 2

Description: The NGS data analysed by CRISPResso software.

File Name: Supplementary Data 3

Description: The NGS data analysed by Cas-Analyzer software.

File Name: Supplementary Data 4

Description: The plasmid sequences of CtIP vector, MS2-CtIP vector, and the PITCh donor vectors used in Figures 2d–f.