

## Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Summary information for sgRNAs targeting genes in the *S. enterica* genome.

File Name: Supplementary Data 2

Description: Summary of sgRNA cloning attempts for sgRNAs. Note that NS refers to 'not sequenced'.

File Name: Supplementary Data 3

Description: Predicted sgRNA off-target sites in *E. coli* genome for all 65 sgRNAs used in this study.

File Name: Supplementary Data 4

Description: List of PCR primers used in this study.

File Name: Supplementary Data 5

Description: GenBank formatted file of the pNuc-cis sequence.

File Name: Supplementary Data 6

Description: GenBank formatted file of the pNuc-trans sequence.

File Name: Supplementary Data 7

Description: GenBank formatted file of the pTA-Mob plasmid.

File Name: Supplementary Data 8

Description: Fasta file of sgRNA sequences targeting *S. enterica* genes for use with `sgRNA.off.target.finder.pl`.

File Name: Supplementary Data 9

Description: Fasta file of *E. coli* MG16552 to be used as a reference genome with `sgRNA.off.target.finder.pl`.

File Name: Supplementary Software 1

Description: Perl script (`sgRNA.off.target.finder.pl`) to find off-target sites in reference genome. Instructions are provided in the header of the program. Use with Supplementary Data 8 and 9.