

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Genome identifiers used in uORF searching

File Name: Supplementary Data 2

Description: A list of candidate monitoring substrate genes for *secA*

File Name: Supplementary Data 3

Description: A list of candidate monitoring substrate genes for *secDF*

File Name: Supplementary Data 4

Description: A list of candidate monitoring substrate genes for *yidC*

File Name: Supplementary Data 5

Description: A list of *E. coli* and *B. subtilis* genes which codes RAPP-like motif

File Name: Supplementary Data 6

Description: Strains used in this study

File Name: Supplementary Data 7

Description: Plasmids used in this study

File Name: Supplementary Data 8

Description: Primers used in this study

File Name: Supplementary Data 9

Description: DNA templates for in vitro transcription/translation reaction

File Name: Supplementary Software

Description: Scripts for bioinformatic analysis