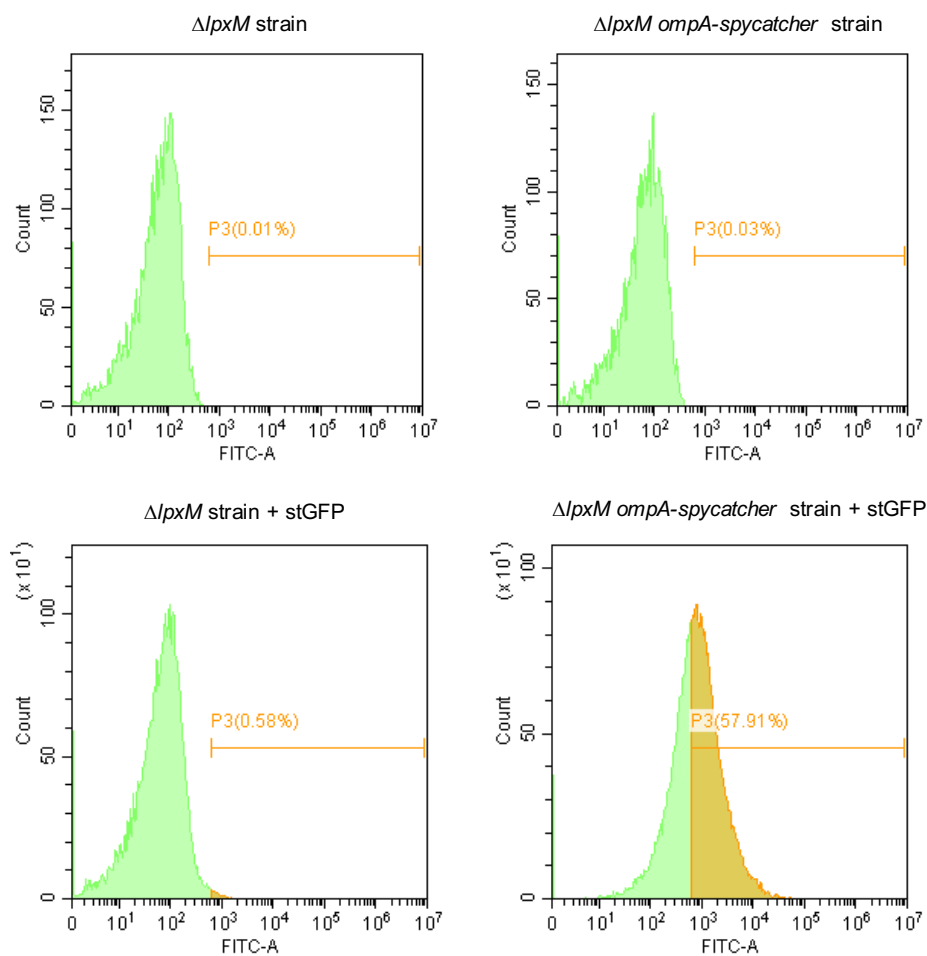


## Supplementary Material

### 1 Supplementary Figures and Tables

#### 1.1 Supplementary Figures



**Supplementary Figure 1. Flow cytometry analysis of the assembly between  $\Delta lpxM$  or  $\Delta lpxM$  *ompA-spycatcher* strains with stGFP.** Bacteria were collected and washed with PBS. Bacterial cell number for each group were adjusted to the same colony forming units (CFU) according to the OD<sub>600</sub>. Bacteria were incubated with or without 5  $\mu$ g stGFP at room temperature for 10 min. All samples were then washed three times with ice-cold PBS. The samples were subjected to flow cytometry analysis using FITC channel to detect the fluorescence.

#### 1.2 Supplementary Tables

**Supplementary Table 1. Bacterial strains and plasmids used in this study.**

Strain Number	Genotype/Phenotype	Source
MG1655	Wild type <i>Escherichia coli</i>	Laboratory stock

JS09	MG1655 $\Delta$ lpxM	This study
JS72	MG1655 $\Delta$ lpxM ompA-spycatcher::kan	This study
pJS59	pET28a-spytag-gfp, Kan+	This study
pJS73	pET28a-spytag-sbi, Kan+	This study
pJS74	pET28a-spytag-esxA, Kan+	This study
pJS79	pET28a-spytag-spA, Kan+	This study

Supplementary Table 2. Primers used in this study.

Primers	Sequences
dellpxM-1	CACCAGATTGATTTTTGCCTTATCCGAAACTGGAAAAGCGCCGAT CATATTCAATAACC
dellpxM-2	TTATCATCAGGCGAAGGCCTCTCCTCGCGAGAGGCTTTTAAGCTT ATCGATACCGTCGA
Colony-lpxM-1	TAAACCAGCAGGCCGTAAAC
Colony-lpxM-2	CATCCGGCCTACAGTTCAAT
ompASC-1	GTGGACCAACAACATCGGTGACGCACACACCATCGGCACTGGCG GCGGCGGCAGCGGCGCCATGGTTGATACCTT
ompASC-2	GGTCGACGGATCCCCGGAATTTAGTGGTGGTGGTGGTGGTCA ATATGAGCGTCACCTT
KN-1	ATTCCGGGGATCCGTCGACC
KN-2	GGTAGGAAACACCCAGGCTCAGCATGCCGTTGTCCGGACGTGTAG GCTGGAGCTGCTTCG
Colony-ompA-1	GTTTCCGCGATTCTCTTCTG
Colony-ompA-2	TAATGCGGAACACCAGCATA
ST-gfp-1	TACAAGCCGACGAAGGGATCCGGCGGCGGCGGCAGCCGTAAAGG CGAAGAGCTGTT
ST-gfp-2	GTGCGGCCGCAAGCTTGTCGACTTTGTACAGTTCATCCATAC
ST-esxA-1	TACAAGCCGACGAAGGGATCCGGCGGCGGCGGCAGCGCAATGAT TAAGATGAGTCC
ST-esxA-2	GTGCGGCCGCAAGCTTGTCGACTTGCAAACCGAAATTATTAG
ST-sbi-1	TACAAGCCGACGAAGGGATCCGGCGGCGGCGGCAGCAACCCAGA CCGACGTGTTGCA
ST-sbi-2	GTGCGGCCGCAAGCTTGTCGACTACAAAGCGGTTGTTTTTATC
ST-SPA-1	TACAAGCCGACGAAGGGATCCGGCGGCGGCGGCAGCGCAAATGC TGCGCAACACGATGAAGCTAAAAA
ST-SPA-2	GTGCGGCCGCAAGCTTGTCGACTTTCGGTGCTTGAGATTCGT