

SUPPLEMENTAL MATERIAL

Contributions of TolC orthologs to *Francisella tularensis* Schu S4 multidrug resistance, modulation of host cell responses, and virulence

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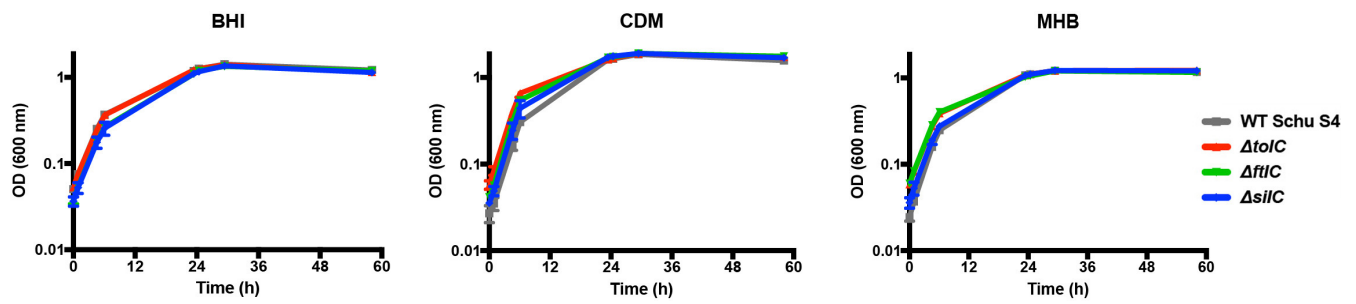


Figure S1. Growth of Schu S4 $\Delta tolC$, $\Delta ftlC$ and $\Delta silC$. Bacteria were cultured in either BHI (A), CDM (B), or MHB (C) and analyzed for growth via OD₆₀₀.

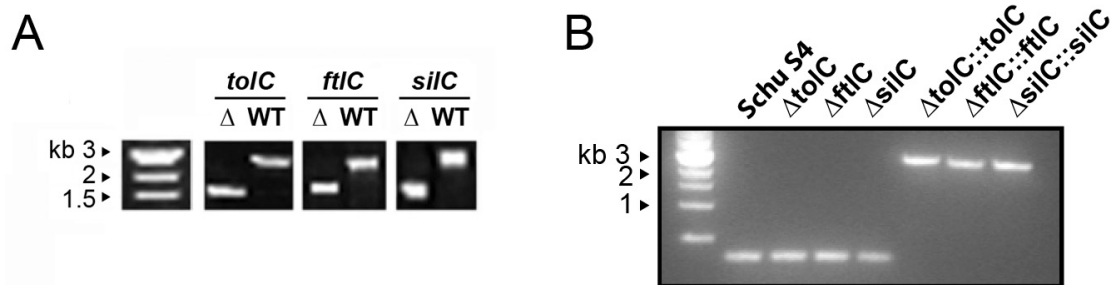


Figure S2. Generation of Schu S4 Δ *tolC*, Δ *ftlC* and Δ *silC* mutants, and complemented strains. (A) PCR confirming deletion of coding regions for *tolC*, *ftlC* and *silC*. (B) PCR confirming complementation of *tolC*, *ftlC* and *silC*.

Table S1. Primers used in this study

Primer name	Nucleotide sequence (5'-3')	Description
tolC_USR-F	TTAGCCGTAGCAAGGCGTC	Forward primer for amplification of DNA upstream of tolC ORF for allelic exchange
tolC_USR-GC-R	GGGGGCCCCCGGGGGGCTAAAGCTAGACAAAACCC	Reverse primer with GC overlap for amplification of DNA upstream of tolC ORF for allelic exchange
tolC_DSR-GC-F	CCCCCGGGGGCCCCCGGAGTAATTAGTTTGATGCC	Forward primer with GC overlap for amplification of DNA downstream of tolC ORF for allelic exchange
tolC_DSR-R	GCACCACTCAAGCCTTTAGC	Reverse primer for amplification of DNA downstream of tolC ORF for allelic exchange
ftlC_USR-F	TGTGGTGGTACTCATGTTGCCT	Forward primer for amplification of DNA upstream of ftlC ORF for allelic exchange
ftlC_USR-GC-R	GGGGGCCCCCGGGGGCGCACTACTTTCAAGCCACC	Reverse primer with GC overlap for amplification of DNA upstream of ftlC ORF for allelic exchange
ftlC_DSR-GC-F	CCCCCGGGGGCCCCCGACGTGGAGCTATAAAGATG	Forward primer with GC overlap for amplification of DNA downstream of ftlC ORF for allelic exchange
ftlC_DSR-R	TAGCAATATCAGCTGGCCCC	Reverse primer for amplification of DNA downstream of ftlC ORF for allelic exchange
silC_USR-F	GGTGCAGCCAACTAAGCTA	Forward primer for amplification of DNA upstream of silC ORF for allelic exchange
silC_USR-GC-R	GGGGGCCCCCGGGGGCGTATCATTGTTGTGACCTA	Reverse primer with GC overlap for amplification of DNA upstream of silC ORF for allelic exchange
silC_DSR-GC-F	CCCCCGGGGGCCCCCTCCTCATTATGATAACCCAGCT	Forward primer with GC overlap for amplification of DNA downstream of silC ORF for allelic exchange
silC_DSR-R	GCAGCCCCATCACCGAATTT	Reverse primer for amplification of DNA downstream of silC ORF for allelic exchange
SchuGroF	TTGTATGGATTAGTCGAGCT	Forward primer for amplification of DNA upstream of <i>GroESL</i> operon
SchuGro_kpnl	GCGCGGACGTCTTGATGGATTAGTCGAGC	Forward primer for amplification of DNA upstream of <i>GroESL</i> operon
SchuGroR	TGCACGACGAACTAATACTC	Reverse primer for amplification of DNA upstream of <i>GroESL</i> operon
TolC_NotI	CCCGCGGCCGCATGAAGAAGTTAACATTATATC	Forward primer for amplification of open reading frame of <i>tolC</i> gene
TolC_BamHI	CCCGGATCCTTACTCCGTTGCAATCTGCG	Reverse primer for amplification of open reading frame of <i>tolC</i> gene
FtlC_NotI	CCCGCGGCCGCTTGAAAGTAGTGCGTAGAT	Forward primer for amplification of open reading frame of <i>ftlC</i> gene
FtlC_BamHI	CCCGGATCCTTATAGCTCCACGTCTTGACC	Reverse primer for amplification of open reading frame of <i>ftlC</i> gene
SilC_NotI	CCCGCGGCCGCATGATACGAAATAAAATAC	Forward primer for amplification of open reading frame of <i>silC</i> gene
SilC_BamHI	CCCGGATCCCTATTTATCAAAGCTGGGTT	Reverse primer for amplification of open reading frame of <i>silC</i> gene