

**Table S1-** Strains and plasmids used in this study.

Strain	Characteristics	Source
<i>F. tularensis</i> LVS	Attenuated <i>F. tularensis</i> vaccine strain	CBER/FDA
LVS $\Delta$ <i>fptA</i>	LVS deletion of FTT_0104c	This study
LVS $\Delta$ <i>fptB</i>	LVS deletion of FTT_0056c	This study
LVS $\Delta$ <i>fptC</i>	LVS deletion of FTT_0671	This study
LVS $\Delta$ <i>fptD</i>	LVS deletion of FTT_0053	This study
LVS $\Delta$ <i>fptE</i>	LVS deletion of FTT_0129	This study
LVS $\Delta$ <i>fptF</i>	LVS deletion of FTT_0127c	This study
LVS $\Delta$ <i>fptG</i>	LVS deletion of FTT_1291	This study
LVS $\Delta$ <i>fptH</i>	LVS deletion of FTT_0488c	This study
LVS $\Delta$ <i>fptI</i>	LVS deletion of FTT_0708	This study
<i>fptB</i> Comp	<i>Trans</i> -complement of $\Delta$ <i>fptB</i>	This study
<i>fptE</i> Comp	<i>Trans</i> -complement of $\Delta$ <i>fptE</i>	This study
<i>fptG</i> Comp	<i>Trans</i> -complement of $\Delta$ <i>fptG</i>	This study
Plasmid	Characteristics	Source
pFT893	Base <i>F. tularensis</i> suicide plasmid	Lab collection
pFT893 $\Delta$ <i>fptA</i>	Suicide plasmid for FTT_0104c	This study
pFT893 $\Delta$ <i>fptB</i>	Suicide plasmid for FTT_0056c	This study
pFT893 $\Delta$ <i>fptC</i>	Suicide plasmid for FTT_0671	This study
pFT893 $\Delta$ <i>fptD</i>	Suicide plasmid for FTT_0053	This study
pFT893 $\Delta$ <i>fptE</i>	Suicide plasmid for FTT_0129	This study
pFT893 $\Delta$ <i>fptF</i>	Suicide plasmid for FTT_0127c	This study
pFT893 $\Delta$ <i>fptG</i>	Suicide plasmid for FTT_1291	This study
pFT893 $\Delta$ <i>fptH</i>	Suicide plasmid for FTT_0488c	This study
pFT893 $\Delta$ <i>fptI</i>	Suicide plasmid for FTT_0708	This study
pFT906	Base <i>F. tularensis</i> complementation plasmid	Lab collection
pFT906 <i>fptB</i>	<i>Trans</i> -complement plasmid for $\Delta$ <i>fptB</i>	This study
pFT906 <i>fptE</i>	<i>Trans</i> -complement plasmid for $\Delta$ <i>fptE</i>	This study
pFT906 <i>fptG</i>	<i>Trans</i> -complement plasmid for $\Delta$ <i>fptG</i>	This study