

**S4 Table. Bacterial strains utilized in this study**

Strain	Description	Source or Reference
<i>S. Infantis</i> 119944	2008 clinical isolate. Sequenced strain	[1]
<i>S. Infantis</i> 119944/pCS26	<i>S. Infantis</i> 119944/pCS26	this study
<i>S. Infantis</i> 119944/pCS26:: <i>Pipf</i>	<i>S. Infantis</i> 119944/pCS26:: <i>Pipf</i>	this study
<i>S. Infantis</i> 119944/pCS26:: <i>Pklf</i>	<i>S. Infantis</i> 119944/pCS26:: <i>Pklf</i>	this study
<i>S. Infantis</i> 119944 <i>ipf</i>	<i>ipf</i> deletion mutant	this study
<i>S. Infantis</i> 119944 <i>klf</i>	<i>klf</i> deletion mutant	this study
<i>S. Infantis</i> 119944 <i>klfL</i>	<i>klfL</i> deletion mutant	this study
<i>S. Infantis</i> 119944 <i>klfB</i>	<i>klfB</i> deletion mutant	this study
<i>S. Infantis</i> 119944 <i>klfA</i>	<i>klfA</i> deletion mutant	this study
<i>S. Infantis</i> 119944 <i>fnr</i>	<i>fnr</i> deletion mutant	[2]
<i>S. Infantis</i> 119944 <i>fur</i>	<i>fur</i> deletion mutant	[2]
<i>S. Infantis</i> 119944 <i>arcA</i>	<i>arcA</i> deletion mutant	[2]
<i>S. Infantis</i> 119944 <i>arcB</i>	<i>arcB</i> deletion mutant	[2]
<i>S. Infantis</i> 119944 <i>phoP</i>	<i>phoP</i> deletion mutant	[2]
<i>S. Infantis</i> 119944 <i>ompR</i>	<i>ompR</i> deletion mutant	[2]
<i>S. Infantis</i> 119944 <i>oxyR</i>	<i>oxyR</i> deletion mutant	[2]
<i>S. Infantis</i> 119944 <i>soxR</i>	<i>soxR</i> deletion mutant	[2]
<i>S. Infantis</i> 119944 <i>lrp</i>	<i>lrp</i> deletion mutant	[2]
<i>S. Infantis</i> 119944 <i>rpoS</i>	<i>rpoS</i> deletion mutant	[2]
<i>S. Infantis</i> 119944/pACYC184	<i>S. Infantis</i> 119944/pACYC184	this study
<i>S. Infantis</i> 119944/pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944/pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>fnr</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>fnr</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>fur</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>fur</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>arcA</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>arcA</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>arcB</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>arcB</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>phoP</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>phoP</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>ompR</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>ompR</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>oxyR</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>oxyR</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>soxR</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>soxR</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>lrp</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>lrp</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>rpoS</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>rpoS</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>klfA</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>klfA</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944 <i>klfB</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>klfB</i> /pACYC184-2HA tag:: <i>klfC</i>	this study

<i>S. Infantis</i> 119944 <i>klfL</i> /pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis</i> 119944 <i>klfL</i> /pACYC184-2HA tag:: <i>klfC</i>	this study
<i>S. Infantis</i> 119944/pWSK29	<i>S. Infantis</i> 119944/pWSK29	this study
<i>S. Infantis</i> 119944/pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944/pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>fnr</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>fnr</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>fur</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>fur</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>arcA</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>arcA</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>arcB</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>arcB</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>phoP</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>phoP</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>ompR</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>ompR</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>oxyR</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>oxyR</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>soxR</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>soxR</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>lrp</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>lrp</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>S. Infantis</i> 119944 <i>rpoS</i> /pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis</i> 119944 <i>rpoS</i> /pWSK29-2HA tag:: <i>ipfD</i>	this study
<i>E. coli</i> ORN172	<i>thr-1 leuB thi-1 Δ(argF-lac)U169 xyl-7 ara-13 mtl-2 gal-6 rpsL tonA2 supE44 Δ(fimBEACDFGH)::kan pilG1</i>	[3]
<i>E. coli</i> ORN172/ pBAD18	<i>E. coli</i> ORN172/pBAD18	this study
<i>E. coli</i> ORN172/ pBAD18:: <i>ipf</i>	<i>E. coli</i> ORN172/pBAD18:: <i>ipf</i>	this study
<i>E. coli</i> ORN172/ pBAD18:: <i>klf</i>	<i>E. coli</i> ORN172/pBAD18:: <i>klf</i>	this study
<i>E. coli</i> ORN172/ P <sub>tetA</sub> - <i>ipfABCD</i>	<i>E. coli</i> ORN172/pWSK29::P <sub>tetA</sub> - <i>ipfABCD</i>	this study
<i>E. coli</i> ORN172/ p4391	<i>E. coli</i> ORN172 pWSK29::P <sub>tetA</sub> - <i>stbABCDEFG</i>	[4]
<i>S. Infantis</i> 119944/ pWSK29	<i>S. Infantis</i> 119944/pWSK29	this study
<i>S. Infantis</i> 119944/ pWSK129	<i>S. Infantis</i> 119944/pWSK129	this study
<i>S. Infantis</i> 119944/ <i>ipf</i> /pWSK29	<i>ipf</i> deletion mutant/pWSK29	this study
<i>S. Infantis</i> 119944/ <i>klf</i> /pWSK29	<i>klf</i> deletion mutant/pWSK29	this study
<b>Plasmids</b>		
pKD46		[5]
pKD3		[5]
pCP20		[5]
pWSK129	Km <sup>r</sup> low copy number cloning vector	[6]
pWSK29	Amp <sup>r</sup> low copy number cloning vector	[6]
pWSK29-2HA tag	2HA tag cloned into pWSK29	
pWSK29-2HA tag:: <i>ipfD</i>	<i>S. Infantis ipfD</i> fused to 2HA tag cloned into pWSK29	this study
pWSK29::P <sub>tetA</sub> - <i>ipfABCD</i>	<i>S. Infantis ipfABCD</i> cloned under <i>tet</i> inducible promoter	this study
pACYC184	Tet <sup>r</sup> Cm <sup>r</sup> cloning vector	(NEB)
pACYC184-2HA tag	2HA tag cloned into pACYC184	

pACYC184-2HA tag:: <i>klfC</i>	<i>S. Infantis klfC</i> fused to 2HA tag cloned into pACYC184	this study
pCS26	Kan <sup>r</sup> cloning vector for <i>luxCDABE</i> fusion	[7]
pCS26:: <i>Pipf</i>	<i>S. Infantis ipf</i> regulatory region cloned into pCS26	this study
pCS26:: <i>Pklf</i>	<i>S. Infantis klf</i> regulatory region cloned into pCS26	this study
pBAD18	Arabinose-inducible expression plasmid, Amp <sup>r</sup>	[8]
pBAD18:: <i>ipf</i>	<i>ipfABCD</i> fimbria cloned into pBAD18	this study
pBAD18:: <i>klf</i>	<i>klfBCDEFGHIJKA</i> fimbria cloned into pBAD18	this study
p4392	<i>S. Typhimurium</i> type 1 fimbriae cloned under tetracycline inducible promoter; amplification of vector for Gibson assembly with <i>ipfABCD</i>	[4]
p4391	pWSK29:: <i>P<sub>tetA</sub>-stbABCDEFG</i>	[4]

## References

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