

**Table S4. List of Strains and Plasmids used in this study.**

Strain	Genotype	Source
AAEC189	<i>E. coli</i>	(1)
SE5000	<i>E. coli</i>	(2)
AJB3	<i>S. Typhimurium</i> SR11 Nalr	(3)
AJB4	AJB3 <i>fim</i>	(3)
STN35	<i>S. Typhimurium bcfC::miniTn5</i> , Kmr	(4)
AJB4 <i>bcfC::mTn5</i>	AJB4 <i>bcfC::miniTn5</i> , Kmr	This study
SL254	<i>S. Newport</i> human isolate with Group A <i>bcfD</i> and <i>fimH</i> alleles and Group A1 <i>stfH</i> allele	(5)
SL317	<i>S. Newport</i> human isolate with Group B <i>bcfD</i> and <i>fimH</i> alleles and Group B1 <i>stfH</i> allele	(5)
0109-1163	<i>S. Newport</i> environmental isolate with Group B <i>bcfD</i> and <i>fimH</i> alleles and Group B2 <i>stfH</i> allele	(5)
0209-48	<i>S. Newport</i> feline isolate with Group A <i>bcfD</i> and <i>fimH</i> alleles and Group A2 <i>stfH</i> allele	(5)
Plasmid	Description	Source
pMAL-c2x	Expression plasmid	New England Biolabs, Inc.
pACYC184	ColE1 compatible cloning vector	(6)
pAZ30	<i>fimH</i> from <i>S. Newport</i> strain 41 cloned into <i>Bam</i> HI and <i>Nde</i> I sites of pMAL-c2x	(7)
pAZ30- <i>fim45</i>	<i>fimH</i> from <i>S. Newport</i> strain 45 cloned into <i>Bam</i> HI and <i>Nde</i> I sites of pMAL-c2x	(7)
pAZ37	<i>fimA</i> through <i>fimF</i> , $\Delta$ <i>fimH</i> , cloned into <i>Bam</i> HI site of pACYC184	(8)
pBAD33	Arabinose inducible cloning vector	(9)
pHSG576	A very low copy number vector	(10)
pLDHSG-Bcf-S	pHSG-576 with <i>bcfA-G</i> from <i>S. Newport</i> strain SL254 cloned into the <i>Bam</i> HI/ <i>Hind</i> III sites	This study
pLDHSG-Bcf-L	pHSG-576 with two DNA binding protein immediately upstream and downstream of the <i>bcf</i> gene cluster and <i>bcfA-H</i> from <i>S. Newport</i> strain SL254 cloned into the <i>Bam</i> HI/ <i>Hind</i> III sites	This study
pLDHSG-Bcf-B	pLDHSG-Bcf-S with the <i>bcfD</i> gene replaced by the <i>bcfD</i> gene from SL317 by Gibson cloning	This study
pLDBAD-Stf	pBAD33 with complete <i>stf</i> gene cluster from <i>S. Newport</i> strain SL254 cloned into multiple cloning site (MCS)	This study
pLDBAD-StfH-SL317	pLDBAD-Stf with <i>stfH</i> gene replaced with <i>stfH</i> allele from <i>S. Newport</i> strain SL317	This study
pLDBAD-StfH-	pLDBAD-Stf with <i>stfH</i> gene replaced with <i>stfH</i>	This study

0109	allele from <i>S. Newport</i> strain 0109-1163	
pLDBAD-StfH-0209	pLDBAD-Stf with <i>stfH</i> gene replaced with <i>stfH</i> allele from <i>S. Newport</i> strain 0209-48	This study

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