

Table S1 Complete genome sequences of three *S. Kentucky* ST198 isolates in this study.

	Size(bp)	Resistance genes	Plasmid replicons
AH19MCS1			
chromosome	4,948,090	<i>bla</i> _{CTX-M-55} / <i>bla</i> _{TEM-1B} / <i>aadA7/aadA17/aph(3')-Ia/aac(3)-IIId</i> <i>/aac(3)-IV/rmtB/tet(A)/sul1/dfrA14/floR/Inu(F)/mph(A)/arr-2/</i> <i>fosA3/qnrS1</i>	
AH19MCS8			
chromosome	4,882,259	<i>bla</i> _{CTX-M-55} / <i>bla</i> _{TEM-1B} / <i>aadA7/aadA17/aph(3')-Ia/aac(3)-IIId</i> <i>rmtB/tet(A)/sul1/dfrA14/floR/Inu(F)/arr-2/ fosA3</i>	
pYUAHMCS8-1	85,309	none	IncI1
pYUAHMCS8-2	4,234	none	/
pYUAHMCS8-3	4,197	none	Col156
pYUAHMCS8-4	3,428	none	/
pYUAHMCS8-5	3,374	none	/
AH19MCS11			
chromosome	4,905,193	<i>bla</i> _{CTX-M-55} / <i>bla</i> _{TEM-1B} / <i>aadA17/aph(3')-Ia/aac(3)-IIId</i> <i>/rmtB/tet(A)/dfrA14/floR/Inu(F)/mph(A)/arr-2</i>	
pYUAHMCS11-1	8,4242	none	IncI-γ, IncN
pYUAHMCS11-2	6,912	none	/
pYUAHMCS11-3	4,657	none	/
pYUAHMCS11-4	3,373	none	/
pYUAHMCS11-5	2,058	none	ColpVC

Table S2 Primers used to assemble SGI1-K variants in this study

Region	Nucleotide Sequence (5' to 3')	Size (bp)
S005-ISVch4-S009- <i>traG</i>	F:CTGTCCAGCAGTCCA R: GCAGGGTTGTATGTGA	1702
<i>traG</i> -ISEc78- <i>traG</i>	F: GATTAGCGGCATTTAC R: GGACCGTGTTCTGT	2894
S013-IS26- <i>aacA5</i>	F: GCCGCTAATAACACGA R: CTCTATGGCTGGTTGG	1327
S013-IS26- <i>sul1</i>	F: GCCGCTAATAACACGA R: CGACACCGAGACCAAT	1347
Tn1721-IS26- <i>yidY</i>	F: TGTCCGCAATCCTCG R: CGCCACGGCTAAATC	1769
<i>yidZ</i> -hy-IS26-NADPH	F: AACGATCCCAACGAA R: TTGCGAATCTGCTCC	1414
Tn1721-IS26- <i>yidZ</i>	F: TTCCACCTATGTGCTCG R: CACCCTTTCTCCCGTAA	1531
<i>yidY</i> -IS26-NADPH	F: ACCAACCGAGAATCCG R: TCCAGCAATGTAACCAC	1366