

TABLE S2: Appearance of *cI*_{JH2010} and *cI*_{JH2016} sequences within the PulseNet reference library.

NCBI Blast queries were conducted using *cI*_{JH2010} and *cI*_{JH2016} nucleotide sequences to compare within the PulseNet NCBI database (BioProject #PRJNA218110). The presence of *stx* subtypes and location of the *cI* genes was determined by NCBI annotation.

CI type	Strain Name (Accession #)	Accession #	Type(s) of <i>stx</i> genes present	Location of <i>cI</i>
<i>cI</i> _{JH2010}	<i>Escherichia coli</i> strain 08-3914 (parental of JH2011)	CP034808.1	<i>stx</i> _{2a} , <i>stx</i> _{2c}	<i>stx</i> _{2a} -phage
	<i>Escherichia coli</i> strain 2014C-3338	CP027452.1	<i>stx</i> _{1a} , <i>stx</i> _{2a}	<i>stx</i> _{1a} -phage
	<i>Escherichia coli</i> strain 2013C-4404*	CP027376.1	<i>stx</i> _{1a}	<i>stx</i> _{1a} -phage
	<i>Escherichia coli</i> strain 2013C-4390*	CP027484.1	<i>stx</i> _{1c}	<i>stx</i> _{1c} -phage
	<i>Escherichia coli</i> strain 2014C-3741	CP027328.1	<i>stx</i> _{1c} , <i>stx</i> _{2b}	<i>stx</i> _{1c} -phage
<i>cI</i> _{JH2016}	<i>Escherichia coli</i> strain PNUSAE013304*	CP034936.1	<i>stx</i> _{2a} , <i>stx</i> _{2c}	<i>stx</i> _{2a} -phage
	<i>Escherichia coli</i> strain 2009C-4687	CP034799.1	<i>stx</i> _{2a} , <i>stx</i> _{2c}	<i>stx</i> _{2a} -phage
	<i>Escherichia coli</i> strain 2010C-3142 (parental of JH2017)	CP034801.1	<i>stx</i> _{2a} , <i>stx</i> _{2c}	<i>stx</i> _{2a} -phage
	<i>Escherichia coli</i> strain 2017C-4109	CP030767.1	<i>stx</i> _{2a} , <i>stx</i> _{2c}	<i>stx</i> _{2a} -phage
	<i>Escherichia coli</i> strain 97-3250	CP027599.1	<i>stx</i> _{1a} , <i>stx</i> _{2a}	<i>stx</i> _{1a} -phage
	<i>Escherichia coli</i> strain 2014C-3011	CP027591.1	<i>stx</i> _{2c}	Non- <i>stx</i> -phage
	<i>Escherichia coli</i> strain 2013C-3264	CP027544.1	<i>stx</i> _{1a}	Non- <i>stx</i> -phage
	<i>Escherichia coli</i> strain 2013C-3252	CP027442.1	<i>stx</i> _{1a}	<i>stx</i> _{1a} -phage

<i>Escherichia coli</i> strain 2011C-4251	CP027388.1	<i>stx</i> _{1a} , <i>stx</i> _{2a}	<i>stx</i> _{1a} -phage
<i>Escherichia coli</i> strain 2015C-3101	CP027221.1	<i>stx</i> _{1a} , <i>stx</i> _{2a}	<i>stx</i> _{2a} -phage
<i>Escherichia coli</i> strain 2015C-3163	CP027219.1	<i>stx</i> _{1a}	<i>stx</i> _{1a} -phage
<i>Escherichia coli</i> strain 2011C-4315	CP024479.1	<i>stx</i> _{1a}	<i>stx</i> _{1a} -phage
<i>Escherichia coli</i> strain 2013C-4465	CP015241.1	<i>stx</i> _{1a}	<i>stx</i> _{1a} -phage
<i>Escherichia coli</i> strain 90-3040	CP027459.1	<i>stx</i> _{2a}	<i>stx</i> _{2a} -phage
<i>Escherichia coli</i> strain 2013C-4538	CP027582.1	<i>stx</i> _{1a}	<i>stx</i> _{1a} -phage
<i>Escherichia coli</i> strain 2014C-3050	CP027472.1	<i>stx</i> _{1a}	<i>stx</i> _{1a} -phage
<i>Escherichia coli</i> strain 2014C-3599	CP027435.1	<i>stx</i> _{2a}	<i>stx</i> _{2a} -phage
<i>Escherichia coli</i> strain 2014C-3655	CP027351.1	<i>stx</i> _{2a}	<i>stx</i> _{2a} -phage
<i>Escherichia coli</i> strain 2015C-3107	CP027317.1	<i>stx</i> _{2a}	<i>stx</i> _{2a} -phage
<i>Escherichia coli</i> strain 2014C-4423	CP027454.1	<i>stx</i> _{2a}	<i>stx</i> _{2a} -phage
<i>Escherichia coli</i> strain 2014C-3003*	CP027672.1	<i>stx</i> _{1c}	<i>stx</i> _{1c} -phage
<i>Escherichia coli</i> strain 2013C-3033	CP027323.1	<i>stx</i> _{1a} , <i>stx</i> _{1c}	<i>stx</i> _{1a} -phage
<i>Escherichia coli</i> strain 2017C- 4173W12	CP030768.1	None	Non- <i>stx</i> -phage

* Strains that did not have NCBI annotation data. For these strains, VirulenceFinder (at 95% identity, 80% coverage) was used to determine the types of *stx* genes present, and proximity of the *cl* nucleotide query to the identified *stx* genes was used to determined the location