

Table S1. Characteristics of *fosA7* in Enterobacteriaceae from animals, food, human, and the environment

Gene	Species	<i>fosA7</i> location	Country	sources	Reference
<i>fosA7</i>	<i>S. Heidelberg</i>	Chromosome	Canada	chicken	Rehman et al., 2017
<i>fosA7</i>	<i>S. Heidelberg</i>	Chromosome	USA	ground Turkey, human	Keefer et al., 2019
<i>fosA7</i>	<i>S. Heidelberg</i> , <i>S. Derby</i>	-	USA	dog	Cummings et al., 2020
<i>fosA7</i>	<i>S. Derby</i>	-	Brazil	food, patient	de Melo et al., 2021
<i>fosA7</i>	<i>S. Infantis</i>	-	Serbia	poultry farm	Jovčić et al., 2020
<i>fosA7</i>	<i>S. Agone</i>	-	USA	papaya	Pightling et al., 2020
<i>fosA7</i>	<i>S. Grumpensis</i> , <i>S. Saphra</i>	-	Brazil	food (viscera, chicken meat, boneless chicken thigh)	Monte et al., 2021
<i>fosA7</i>	<i>S. Brandenburg</i> , <i>S. Heidelberg</i>	-		Food (chicken breast, chicken wing), chicken cage after cleaning	Monte et al., 2019
<i>fosA7</i>	<i>C. koseri</i>	-	South Africa	sewage sludge	Ekwanzala et al., 2020
<i>fosA7</i>	-	-	USA	environment, clinical	Hua et al., 2020
<i>fosA7.5</i>	<i>E. coli</i>	plasmid	Canada	patient	Milner et al., 2020
<i>fosA7</i>	<i>E. coli</i>	chromosome	China	cattle, sheep, patients	Pan et al., 2021

-, not available.

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Table S2. *Salmonella enterica* isolates obtained from July 2019 to June 2020 used in this study

Serovars	Sources (no.)					Total
	pig	cattle	chicken meat	pork	beef	
Albany			2			2
Anatum			1	4		5
Braenderup			9	1		10
Corvallis			3			3
Derby		7		18	1	26
Enteritidis			9			9
Give			1	1		2
Goldcoast				7		7
Indiana			19			19
Infantis				1		1
Kentucky	1		33	1		35
Kottbus			2			2
Litchfield				6		6
Livingstone				4		4
London	4		3	20	16	43
Mbandaka		1				1
Newport				10		10
Putten			2			2
Rissen	2		2	19	1	24
Saintpaul			2	7		9
Senftenberg				1		1
Thompson			2			2
Typhimurium	4		1	28	1	34
Uganda				7		7

Table S3. Primers used to delete *fosA7* in *S. Derby* HA2-WA5

Primer name	Primer sequence (5 to 3)	Size (bp)
<i>fosA7</i> -UpF	GAGCGGATAACAATTTGTGGAATCCCGGGAAGCTGATGATATGCTTTTTTCGCAAG	436
<i>fosA7</i> -UpR	CTAAATCTCCTGCAAATTACTGACAGCAAGCGTTA	
<i>fosA7</i> -DownF	GTAATTTGCAGGAGATTTAGCATCCCGACTGACGC	377
<i>fosA7</i> -DownR	AGCGGAGTGTATATCAAGCTTATCGATACCTGTACATTCAAGACATTATTGCAGA	
<i>fosA7</i> -InF	TGTTGAGTGGGATACTGGCGCTTAC	229
<i>fosA7</i> -InR	CGGATCAAGAAAATAGAAAGATTGC	
<i>fosA7</i> -OutF	AGCTGATGATATGCTTTTTTCGCAAG	1571
<i>fosA7</i> -OutR	TCTCGTCAGCGATGTCTTCCT	(1270)

Table S4. MICs of fosfomycin against parental strains and pBR322-*fosA7* transformations

Strains	Fosfomycin MIC (mg/L)
<i>E. coli</i> DH5 α	0.25
DH5 α -pBR322	0.25
DH5 α -pBR322- <i>fosA7</i>	4
<i>S. Typhimurium</i> SL1344	0.5
SL1344-pUC57	0.5
SL1344-pUC57-tetA-variant	512
<i>S. Pullorum</i> C79-13	0.5
C79-13-pBR322	0.5
C79-13-pBR322- <i>fosA7</i>	512
<i>S. Enteritidis</i> P125109	0.5
P125109-pBR322	0.5
P125109-pBR322- <i>fosA7</i>	512
<i>S. Derby</i> 14C-S8N4	0.5
14C-S8N4-pBR322	0.5
14C-S8N4	512

1 kb

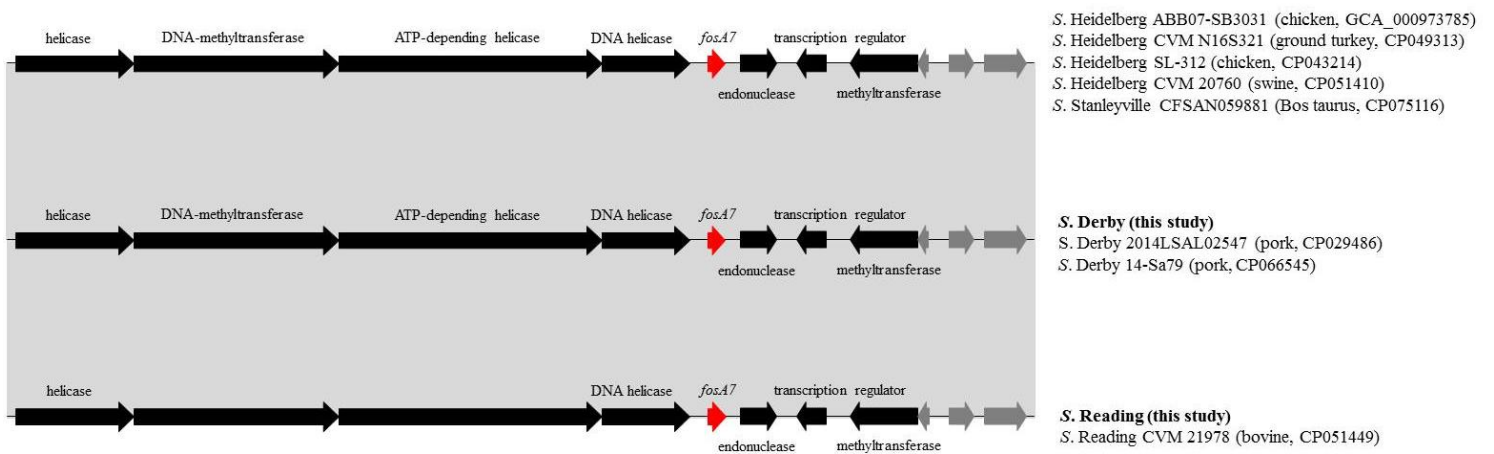


Figure S1. Genetic environment of *fosA7* and its neighboring region (~24.3 kb) in *Salmonella* Derby and *Salmonella* Reading isolates in this study and comparison with other *fosA7*-carrying regions in *Salmonella*. Regions with > 98% homology are shaded in gray.

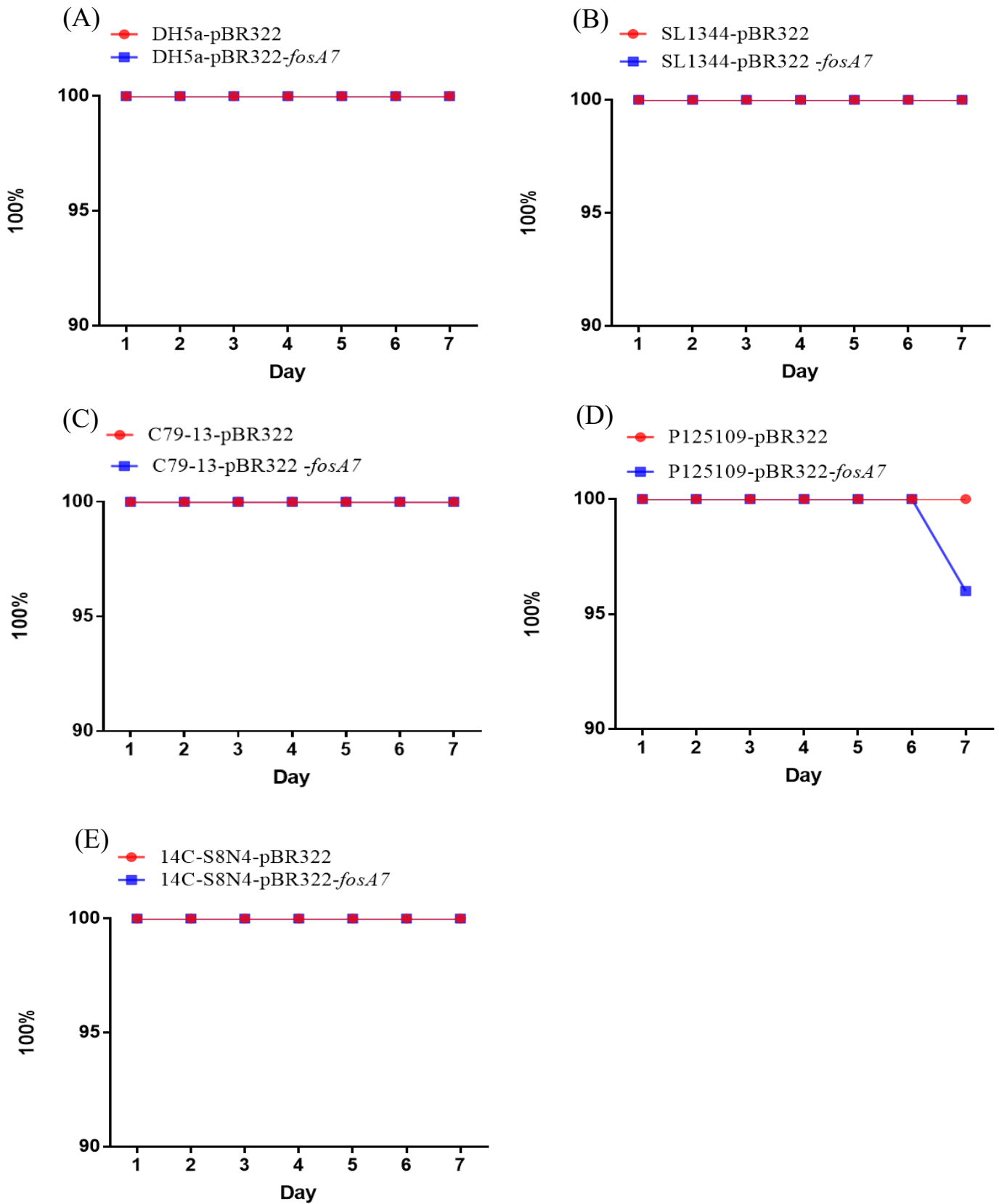


Figure S2. Plasmid stability of pBR322 and pBR322-*fosA7* in *E. coli* and *Salmonella*. (A) *E. coli* DH5 α ; (B) *S.* Typhimurium SL1344; (C) *S.* Pullorum C79-13; (D) *S.* Enteritidis P125109; (E) *S.* Derby 14C-S8N4.