

Table S1: Strains and plasmids used in this study**S. Typhimurium strains**

IR715	Nalidixic acid-resistant derivative of ATCC 14028	(9)
SL1344	ST4/74 <i>his</i>	(2, 7)
AJB715	IR715 Δ <i>phoN</i> ::Kan ^R	(3)
M30	ATCC 14028 SopEΦ Kan ^R	(11)
SPN450	IR715 Δ <i>spiB</i> ::Kan ^R	(6)
SPN452	IR715 Δ <i>invA</i> ::Tet ^R Δ <i>spiB</i> ::Kan ^R	(6)
SPN456	IR715 Δ <i>spiB</i>	This study
SPN458	IR715 Δ <i>spiB</i> ::pSPN56	This study
SW562	IR715 Δ <i>invA</i> ::Tet ^R	(10)
SW661	IR715 <i>ttrA</i> ::pSW171	(10)
SW975	SL1344 Δ <i>sopE</i> ::Kan ^R	This study
SW976	SL1344 Δ <i>sopE</i>	This study
CAL27	IR715 <i>narG</i> ::pCAL5	This study
CAL34	IR715 Δ <i>narZ</i> ::Kan ^R	This study
CAL40	IR715 Δ <i>narZ</i>	This study
CAL42	IR715 Δ <i>napA</i> ::Kan ^R	This study
CAL45	IR715 Δ <i>narZ</i> ::pCAL10	This study
CAL46	IR715 Δ <i>napA</i>	This study
CAL50	IR715 Δ <i>napA</i> Δ <i>narZ</i> <i>narG</i> ::pCAL5	This study
CAL51	SL1344 Δ <i>narZ</i>	This study
CAL55	SL1344 Δ <i>napA</i> Δ <i>narZ</i> <i>narG</i> ::pCAL5	This study

CAL63	SL1344 $\Delta phoN::Kan^R$	This study
CAL64	SL1344 $\Delta phoN::Kan^R \Delta napA \Delta narZ narG::pCAL5$	This study
CAL65	SL1344 $narG::pCAL5$	This study
CAL66	SL1344 $\Delta phoN::Kan^R ttrA::pSW171$	This study
CAL67	SL1344 $\Delta napA$	This study
CAL74	SL1344 $\Delta sopE::pSW245$	This study
CAL85	SL1344 $\Delta phoN::Kan^R \Delta invA::Tet^R \Delta spiB$ $\Delta napA \Delta narZ narG::pCAL5$	This study
CAL86	SL1344 $\Delta phoN::Kan^R \Delta invA::Tet^R \Delta spiB$	This study
CAL87	IR715 $\Delta napA \Delta narZ narG::pCAL5$ $\Delta invA::Tet^R \Delta spiB$	This study
CAL88	SL1344 $\Delta phoN::Kan^R \Delta sopE$	This study
CAL89	SL1344 $\Delta phoN::Kan^R \Delta napA \Delta narZ narG::pCAL5$ $\Delta sopE$	This study
CAL98	IR715 SopE1Φ $Kan^R \Delta napA \Delta narZ narG::pCAL5$	This study
CAL99	IR715 SopE1Φ Kan^R	This study
CAL102	IR715 SopE1Φ $Kan^R \Delta sopE$	This study
CAL103	IR715 SopE1Φ $Kan^R \Delta sopE \Delta napA \Delta narZ$ $\Delta narG::pCAL5$	This study
CAL117	IR715 $\Delta napA::pCAL9$	This study

***E. coli* strains**

DH5 α λpir F $^-$ $endA1 hsdR17 (r^m^+) supE44 thi-1$ (1)

	<i>recA1 gyrA relA1 Δ(lacZYA-argF)_{U189}</i>	
	<i>Φ80lacZΔM15 λpir</i>	
S17-1 <i>λpir</i>	C600::RP4 2-(Tet)::Mu) (Kan::Tn7) <i>λpir</i>	(8)
	<i>recA1 thi pro hsdR (r⁻m⁺)</i>	
TOP10	Φ80/ <i>lacZΔM15 lacX74 recA1 araD139</i>	Invitrogen
	<i>Δ(ara-leu) 7697 galU galK rpsL endA1</i>	
	<i>nupG</i>	

Plasmids:

pCR2.1	cloning vector	Invitrogen
pGP704	<i>ori(R6K) mobRP4 Carb^R</i>	(5)
pRDH10	<i>sacRB ori(R6K) mobRP4 Tet^R Cm^R</i>	(4)
pUC4 KSAC	<i>ori(pMB1) Carb^R Kan^R</i>	Pharmacia (GE Healthcare)
pSW172	<i>ori(R101) repA101ts Carb^R</i>	This study
pSW245	pRDH10 with regions upstream and downstream of <i>sopE</i>	This study
pSW246	pRDH10 with regions upstream and downstream of <i>sopE</i> flanking a Kan ^R cassette	This study
pCAL1	pCR2.1 with regions upstream and downstream of <i>narZ</i>	This study
pCAL3	pCR2.1 with regions upstream and downstream of <i>napA</i>	This study
pCAL5	pGP704 with regions upstream and	This study

	downstream of <i>narG</i>	
pCAL9	pRDH10 with regions upstream and downstream of <i>napA</i>	This study
pCAL10	pRDH10 with regions upstream and downstream of <i>narZ</i>	This study
pCAL11	pRDH10 with regions upstream and downstream of <i>napA</i> flanking a Kan ^R cassette	This study
pCAL12	pRDH10 with regions upstream and downstream of <i>narZ</i> flanking a Kan ^R cassette	This study
pSPN56	pRDH10 with regions upstream and downstream of <i>spiB</i>	(6)

References for Table S1:

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