Table S1. Bacterial strains, plasmids, and oligonucleotides used in this study.

(A) Bacterial strains and plasmids

Name	Description	Reference
***S. enteric* serovar Typhimurium**		
14028s	wild-type	Fields et al. (1986)
SM101	*⊿phoU*	Choi et al. (2022)
SM323	*phoU* $^{\text{Ala 147 Glu}}$	Choi et al. (2022)
SM108	pBAD33-*phoU*-His, pTGFP	This study
SM109	pBAD33-*phoU*-His, pTGFP-*phoR*	This study
SM343	pBAD33-*phoU* $^{\text{Ala 147 Glu}}$-His, pTGFP-*phoR*	This study
SM454	*phoR*-8×Myc	Choi et al. (2022)
SM443	*phoU* $^{\text{Ala 147 Glu}}$, *phoR*-8×myc::Km^R	This study
SM457	*phoU* $^{\text{Ala 147 Glu}}$, *phoR*-8×myc	This study
Escherichia coli		
DH5α	*fhuA2 lac(del)U169 phoA glnV44 Φ80' lacZ(del)M15 gyrA96 recA1 relA1 endA1 thi-1 hsdR17*.	Taylor, Walker et al. (1993)
SM329	DH5α/pBAD33- *phoU* $^{\text{Ala 147 Glu}}$-His	This study
BTH101	*F-, cya-854, recA1, endA1, gyrA96 (Nal^r), thi1, hsdR17, spoT1, rfbD1, glnV44(AS)*	Karimova, et al. (1998)
LJ18	BTH101/pUT18-*mgtC*, pKT25-*mgtR*	Choi et al. (2019)
LJ27	BTH101/pUT18-*mgtC*, pKT25	Choi et al. (2019)
SM089	BTH101/pUT18-*phoU*, pKT25-*phoR*	Choi et al. (2022)
SM314	BTH101/pUT18c-*phoU* $^{\text{Ala 147 Glu}}$, pKT25-*phoR*	Choi et al. (2022)
SM315	BTH101/pUT18c-*phoU* $^{\text{Ala 147 Lys}}$, pKT25-*phoR*	Choi et al. (2022)
SM311	BTH101/pUT18c-*phoU* $^{\text{Arg 148 Ala}}$, pKT25-*phoR*	Choi et al. (2022)
SM210	BTH101/pUT18-*phoU*, pKT25-*pstB*	This study
SM326	BTH101/pUT18c-*phoU* $^{\text{Ala 147 Glu}}$, pKT25-*pstB*	This study
SM327	BTH101/pUT18c-*phoU* $^{\text{Ala 147 Lys}}$, pKT25-*pstB*	This study
SM328	BTH101/pUT18c-*phoU* $^{\text{Arg 148 Ala}}$, pKT25-*pstB*	This study
Plasmids		
pBAD33	pACYC184 *ori* Cm^R	Guzman et al. (1995)
pBOP508	rep_{R6K} Ap^R 8×myc FRT Km^R FRT	Cho et al. (2006)
pKD46	$rep_{pSC101}{}^{ts}$ Ap^R P_{araBAD} γ β exo	Datsenko and Wanner (2000)
pCP20	$rep_{pSC101}{}^{ts}$ Ap^R Cm^R *cI857* λP_R*flp*	Datsenko and Wanner (2000)
pUT18	p_{lac} ColEI *ori* Ap^R	Karimova, et al. (2001)
pUT18c	p_{lac} ColEI *ori* Ap^R	Karimova, et al. (2001)

pKT25	p_{lac} p15A*ori* Km^R	Karimova, et al. (2001)
pTGFP	ColE1 *ori* Ap^R 'gfp	Lee and Groisman (2012)

(B) Primers used in this study.

Name	Sequence (from 5' to 3')*	
Knockout, deletion, tagging		
KU452	TGA GCT GGA TAA GCT GCT GGC GGG GAA AGA TCC GAA AGA GAT CGG ATC CAG AAT TCG TGA T	*phoR*-8×Myc Km^R insertion
KU453	GGC CCG GTA AGC GCA GCG CCA CCG GGC AAA AGA ATG AGA TGA GCT CGA TCC GTC GAC C	*phoR*-8×Myc Km^R insertion
Cloning		
KHU767	CCC AAG CTT TTA GTG GTG ATG GTG ATG ATG CTC TTT CGG ATC TTT CCC CG	*phoU*-His-HindIII-R
KHU768	GCT CTA GAT AAT TCA GGA GTG CGT AAT GGA CAG TCT GAA CCT TAA	*phoU*-XbaI-F
For qRT-PCR		
KHQ015	CGCTGGGAAGCTGAGTTTG	*phoE* qPCR-F
KHQ016	CCAGGCCTCAACATCGTACA	*phoE* qPCR-R
KHQ097	CATATTTCCGGCCAGTTCAAC	*phoU* qPCR-F
KHQ098	CGGTGATAGCGTCAGAAAG	*phoU* qPCR-R
6970	CCAGCAGCCGCGGTAAT	*rrsH* qPCR -F
6971	TTTACGCCCAGTAATTCCGATT	*rrsH* qPCR -R

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