

**Supplementary Table 1** A list of bacterial strains, plasmids and primers used in this study. (U, upstream primer with XbaI restriction site; D, downstream primer with HindIII restriction site)

Strains, plasmid or primer	Relevant genotype and/or property	Reference
<i>E. coli</i> K12		
BW25113	F-, Δ(araD-araB)567, ΔlacZ4787(::rrnB-3), λ-, rph-1, Δ(rhaD-rhaB)568, hsdR514	CGSC# 7636
TOP10	F- mcrA D(mrr-hsdRMS-mcrBC) w80lacZDM15 DlacX74 deoR nupG recA1 araD139 D(ara-eu)7697 galE15 galK16 rpsL(StrR) endA1 l	invitrogen
JW0389-1	BW25113 ΔphoB763::kan	CGSC# 8565
JW0494-1	BW25113 ΔallR789::kan	CGSC# 8639
JW0669-2	BW25113 Δfur-731::kan	CGSC# 8758
JW0872-2	BW25113 ΔIrp-787::kan	CGSC# 8901
JW0895-3	BW25113 ΔihfB735::kan	CGSC# 8917
JW1316-1	BW25113 ΔtyrR760::kan	CGSC# 9179
JW1702-1	BW25113 ΔihfA786::kan	CGSC# 9441
JW1935-1	BW25113 ΔrcsA726::kan	CGSC# 9610
JW2205-2	BW25113 ΔrcsB770::kan	CGSC# 9783
JW2521-1	BW25113 ΔhcaR782::kan	CGSC# 10007
JW3100-1	BW25113 ΔagaR745::kan	CGSC# 10362
JW3229-1	BW25113 Δfis-779::kan	CGSC# 10443
JW3484-1	BW25113 ΔgadX771::kan	CGSC# 10580
JW3883-1	BW25113 ΔcpxR772::kan	CGSC# 10800
JW4050-1	BW25113 ΔrpiR784::kan	CGSC# 10915
JW4356-2	BW25113 ΔtrpR789::kan	CGSC# 11110
JW5096-1	BW25113 ΔkdpE743::kan	CGSC# 11171
JW5249-1	BW25113 ΔmarA752::kan	CGSC# 11269
JW5437-1	BW25113 ΔrpoS746::kan	CGSC# 11387
JW5702-4	BW25113 Δcrp-765::kan	CGSC# 11596
<i>agar-fis</i>	BW25113 ΔagaR745, Δfis-779::kan	In this study
<i>agar-fur</i>	BW25113 ΔagaR745, Δfur-731::kan	In this study
<i>agar-ihfa</i>	BW25113 ΔagaR745, ΔihfA786::kan	In this study
<i>agar-ihfb</i>	BW25113 ΔagaR745, ΔihfB735::kan	In this study
<i>agar-rpos</i>	BW25113 ΔagaR745, ΔrpoS746::kan	In this study
<i>fis-fur</i>	BW25113 Δfis-779, Δfur-731::kan	In this study
<i>fis-ihfa</i>	BW25113 Δfis-779, ΔihfA786::kan	In this study
<i>fis-ihfb</i>	BW25113 Δfis-779, ΔihfB735::kan	In this study
<i>fur-rpos</i>	BW25113 Δfur-731, ΔrpoS746::kan	In this study
<i>gadx-rpos</i>	BW25113 ΔgadX771, ΔrpoS746::kan	In this study
<i>hcar-agar</i>	BW25113 ΔhcaR782, ΔagaR745::kan	In this study
<i>hcar-fur</i>	BW25113 ΔhcaR782, Δfur-731::kan	In this study
<i>hcar-ihfa</i>	BW25113 ΔhcaR782, ΔihfA786::kan	In this study
<i>hcar-ihfb</i>	BW25113 ΔhcaR782, ΔihfB735::kan	In this study
<i>hcar-rpos</i>	BW25113 ΔhcaR782, ΔrpoS746::kan	In this study

<i>rca-rca</i>	BW25113 $\Delta$ rcaA726, $\Delta$ rcaB770::kan	In this study
<i>rca-crp</i>	BW25113 $\Delta$ rcaB770, $\Delta$ crp-765::kan	In this study
<i>rpo-ihfA</i>	BW25113 $\Delta$ rpoS746, $\Delta$ ihfA786::kan	In this study
<i>rpo-ihfB</i>	BW25113 $\Delta$ rpoS746, $\Delta$ ihfB735::kan	In this study

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<b>Plasmids</b>	<b>Relevant genotype and/or property</b>	<b>Reference</b>
pBAD30-rcsA	pBAD30 derivative, BW25113 rcsA+, Ampr	This study
pBAD30-rcsB	pBAD30 derivative, BW25113 rcsB+, Ampr	This study
pBAD30-fur	pBAD30 derivative, BW25113 fur+, Ampr	This study
pBAD30-IHFb	pBAD30 derivative, BW25113 ihfB+, Ampr	This study
pBAD30-Fis	pBAD30 derivative, BW25113 fis+, Ampr	This study
pBAD30-RpoS	pBAD30 derivative, BW25113 rpoS+, Ampr	This study
pBAD30-AgaR	pBAD30 derivative, BW25113 agaR+, Ampr	This study
pBAD30-HcaR	pBAD30 derivative, BW25113 hcaR+, Ampr	This study
pBAD30-GadX	pBAD30 derivative, BW25113 gadX+, Ampr	This study
pBAD30-IbpA	pBAD30 derivative, BW25113 ibpA+, Ampr	This study

<b>Primers</b>	<b>Sequence</b>
rcsA-U	AGTGTCTAGATGAGGGTATGCCATG
rcsA-D	AGTGAAGCTTTTAGCGCATGTTGAC
rcsB-U	AGCTGTCTAGAGTAGCCTATTACATG
rcsB-D	AGGTAAGCTTTTAGTCTTTATCTGCCGGAC
fur-U	AGTGTCTAGAGACAGATTCCGCATG
fur-D	AGGTCAAGCTTTTATTTGCCTTCGTGC
agaR-U	CGACGTCTAGAAGGACTTACTATGAG
agaR-D	ATTGAAGCTTTTCACTCCCCGA
hcaR-U	TCACTCTAGAAAGGGGAAGGTGATG
hcaR-D	GACTGGAAGCTTTTATGCCGTTACG
rpoS-U	GTGACTCTAGAAGGAGCCACCTTATG
rpoS-D	ATTGAAGCTTTTACTCGCGGAAC
IHFb-U	TGACTCTAGAACCGGAGGAATCATG
IHFb-D	GACTGGAAGCTTTTAACCGTAAATATTG
FIS-U	AGTCCTCTAGACTGACAGAACTATG
FIS-D	CTGTGAAGCTTTTAGTTCATGCCGTA
gadX-U	GTCCTCTAGAATTAAGTCAACTATGC
gadX-D	CAGTGCAAGCTTCTATAATCTTATTCC
ibpA-U	CGTGTCTAGAGAGCTATTGATTATGC
ibpA-D	TGACGAAGCTTTTAGTTGATTTCG