Table S1. Strains, Plasmids and Phage

Strain, Plasmid, Phage	Genotype or Description	Reference
S. enterica		
14028	wild type ATCC strain	(1)
HK132	Δ*yfiN*; 14028 with deletion of *yfiN*	This study
QW262	Δ*yhjH*	(2)
HK133	Δ*STM1987*	This study
HK134	Δ*yeaJ*	This study
HK135	Δ*STM4551*	This study
HK136	Δ*adrA*	This study
HK137	Δ*yjcC*	This study
HK138	Δ*ylaB*	This study
HK139	Δ*STM1827*	This study
HK140	Δ*STM0343*	This study
HK141	Δ*STM2215*	This study
HK142	Δ*STM3388*	This study
HK143	Δ*yciR*	This study
HK144	Δ*yegE*	This study
HK145	Δ*yhdA*	This study
HK147	Δ*ydiV*	This study
HK148	Δ*STM2503*	This study
HK149	Δ*yhjK*	This study
HK150	Δ*yfeA*	This study
HK164	Δ*yhjH* Δ*yfiN*; 14028 with double deletions of *yhjH* and *yfiN*	This study
HK165	Δ*yhjH* Δ*STM1987*	This study
HK166	Δ*yhjH* Δ*yeaJ*	This study
HK167	Δ*yhjH* Δ*STM4551*	This study
HK168	Δ*yhjH* Δ*adrA*	This study
HK169	Δ*yhjH* Δ*yjcC*	This study
HK170	Δ*yhjH* Δ*ylaB*	This study
HK171	Δ*yhjH* Δ*STM1827*	This study
HK172	Δ*yhjH* Δ*STM0343*	This study
HK173	Δ*yhjH* Δ*STM2215*	This study
HK174	Δ*yhjH* Δ*STM3388*	This study
HK175	Δ*yhjH* Δ*yciR*	This study
HK176	Δ*yhjH* Δ*yegE*	This study
HK177	Δ*yhjH* Δ*yhdA*	This study
HK178	Δ*yhjH* Δ*ydiV*	This study
HK179	Δ*yhjH* Δ*STM2503*	This study
HK180	Δ*yhjH* Δ*yhjK*	This study
HK181	Δ*yhjH* Δ*yfeA*	This study
HK185	HK164 + pBAD30	This study
HK186	HK164 + pBAD30-^{S}YfiN	This study
HK187	HK164 + pBAD30-^{S}YfiN(GGAAF; active site mutant)	This study
HK261	HK132 + pBAD30-^{S}YfiN$_{GFP}$	This study
HK620	HK132 + pBAD33-^{S}YfiN(GGAAF)$_{GFP}$	This study

HK435	HK132 + pBAD30-^{S}YfiN	This study
HK269	HK132 + pBAD30-DgcA	This study
HK375	HK132 + pBAD33-^{S}YfiN$_{YFP}$ + pBAD30-^{S}FtsA$_{CFP}$	This study
HK373	HK261+ pBAD33	This study
HK372	HK261 + pBAD33-^{S}SulA	This study
HK683	HK132 + pBAD33-^{S}YfiN$_{YFP}$ + pBAD30-$_{CFP}$^{S}FtsN	This study
HK369	HK132 + pBAD33-^{S}YfiN$_{YFP}$	This study
HK377	HK132 + pBAD30-^{P}YfiN$_{GFP}$	This study
HK698	14028 + pBAD33-^{S}SulA	This study
HK631	14028 + pBAD30- ^{S}YfiN$_{GFP}$	This study
E. coli		
MG1655	K12 wild type strain: F^{-}, λ^{-}, *rph*-1	Laboratory Collection
HK359	Δ*yfiN*; MG1655 with deletion of *yfiN*	This study
HK360	Δ*yfiB*; MG1655 with deletion of *yfiB*	This study
HK361	Δ*yfiR*; MG1655 with deletion of *yfiR*	This study
WM1125	MG1655 *lacU169 ftsZ84*	(3)
WM1115	MG1655 *lacU169 ftsA12*	(4)
PS223	W3110 *zipA1*	(5)
JW3832	BW25113 *dsbA::kan*	(6)
BTH101	F^{-},*cya*-99, *ara*D139, *gal*E15, *gal*K16, *rps*L1, *hsd*R2, *mcr*A1, *mcr*B1	(7)
XL1-blue	*RecA1*, *endA1*, *gyrA96*, *thi-1*, *hsdR17*, *supE44*, *relA1*, *lac*, [F′, *proAB*, *lac1qZΔM15*, *Tn10 (tet*′)]	Stratagene
HK365	HK359 + pBAD30-^{E}YfiN$_{GFP}$	This study
HK366	HK360 + pBAD30-^{E}YfiN$_{GFP}$	This study
HK549	HK359 + pBAD33-^{E}YfiN$_{GFP}$	This study
HK489	MG1655 *yfiN::*^{E}*yfiN-gfp*	This study
HK531	MG1655 *yfiR::kan*(←)	This study
HK532	MG1655 *yfiR::kan*(←) *yfiN*::P$_{BAD}$-^{E}*yfiN-gfp*	This study
HK604	MG1655 + pBAD30-DgcA	This study
HK635	MG1655 + pBAD30-^{E}YfiN$_{GFP}$	This study
HK381	WM1125 + pBAD30-^{E}YfiN$_{GFP}$	This study
HK380	WM1115 + pBAD30-^{E}YfiN$_{GFP}$	This study
HK590	PS223 + pBAD30-^{E}YfiN$_{GFP}$	This study
HK470	BTH101 + pUT18 + pKNT25	This study
HK469	BTH101 + pUT18-zip + pKNT25-zip	This study
HK597	BTH101 + pUT18-^{E}YfiN + pKNT25-^{E}YfiN	This study
HK598	BTH101 + pUT18-^{E}YfiN + pKNT25-^{E}FtsZ	This study
HK599	BTH101 + pUT18-^{E}YfiN + pKNT25-^{E}FtsA	This study
HK600	BTH101 + pUT18-^{E}YfiN + pKNT25-^{E}ZipA	This study
HK725	BTH101 + pUT18C-^{E}MreB + pKNT25- ^{E}FtsZ	This study
HK726	BTH101 + pUT18C-^{E}MreB + pKNT25- ^{E}YfiN	This study
HK636	HK359 + pBAD30-^{P}YfiN$_{GFP}$	This study
HK571	HK359 + pBAD33-^{E}YfiN(GGAAF)$_{GFP}$ + pTrc99A	This study
HK572	HK359 + pBAD33-^{E}YfiN(GGAAF)$_{GFP}$ + pTrc99A-DgcA	This study

HK580	BTH101 + pBAD33 + pUT18-^{E}YfiN(GGAAF) + pKNT25-^{E}FtsZ	This study
HK582	BTH101 + pBAD33 + pUT18-^{E}YfiN(GGAAF) + pKNT25	This study
HK576	BTH101 + pBAD33-DgcA + pUT18-^{E}YfiN(GGAAF) + pKNT25-^{E}FtsZ	This study
HK578	BTH101 + pBAD33-DgcA + pUT18-^{E}YfiN(GGAAF) + pKNT25	This study
HK608	BTH101 + pBAD33 + pUT18-^{E}YfiN(GGAAF) + pKNT25-^{E}ZipA	This study
HK609	BTH101 + pBAD33 + pUT18-^{E}YfiN(GGAAF) + pKNT25	This study
HK606	BTH101 + pBAD33-DgcA + pUT18-^{E}YfiN(GGAAF) + pKNT25-^{E}ZipA	This study
HK607	BTH101 + pBAD33-DgcA + pUT18-^{E}YfiN(GGAAF) + pKNT25	This study
HK551	HK359 + pBAD33-^{E}YfiN$_{GFP}$ + pTrc99A	This study
HK552	HK359 + pBAD33-^{E}YfiN$_{GFP}$ + pTrc99A-^{E}YfiR	This study
HK367	HK361 + pBAD30-^{E}YfiN$_{GFP}$	This study
HK626	JW3832 + pBAD33-^{E}YfiN$_{GFP}$ + pTrc99A-^{E}YfiR	This study
P. aeruginosa		
PAO1	PAO1 wild type	gift from M. Whiteley
HK376	PAO1 + pJN105-^{P}YfiN$_{GFP}$	This study
Plasmid		
pKD4	Kanamycin resistance gene template	(8)
pKD46	λ Red Recombinase	(8)
pCP20	FLP recombinase	(8)
pBAD30	Cloning vector; P_{BAD} and Amp^{R}	(9)
pBAD33	Cloning vector; P_{BAD} and Cm^{R}	(9)
pTrc99A	Cloning vector; P_{Trc} and Amp^{R}	(10)
pJN105	Cloning vector; P_{BAD} and Gm^{R}	(11)
pAB551	P_{BAD}::*dgcA* from *C. crescentus*	(12)
pBAD30-^{S}YfiN	P_{BAD}:: ^{S}*yfiN*	This study
pBAD30-^{S}YfiN(GGAAF)	P_{BAD}::^{S}*yfiN*(D327A E328A)	This study
pBAD30-^{S}YfiN$_{GFP}$	P_{BAD}:: ^{S}*yfiN-gfp*	This study
pBAD33-^{S}YfiN(GGAAF)$_{GFP}$	P_{BAD}:: ^{S}*yfiN*(D327A E328A)-*gfp*	This study
pBAD33-^{S}YfiN$_{YFP}$	P_{BAD}:: ^{S}*yfiN-yfp*	This study
pBAD30-^{S}FtsA$_{CFP}$	P_{BAD}:: ^{S}*ftsA-cfp*	This study
pBAD33-^{S}SulA	P_{BAD}:: ^{S}*sulA*	This study
pBAD30-$^{S}_{CFP}$FtsN	P_{BAD}::*cfp*-^{S}*ftsN*	This study
pBAD30-^{E}YfiN$_{GFP}$	P_{BAD}:: ^{E}*yfiN-gfp*	This study
pUT18	P_{lac}::-*T18*; Amp^{R}	(7)
pUT18C	P_{lac}::*T18*-; Amp^{R}	(7)
pKNT25	P_{lac}::-*T25*; Kan^{R}	(7)
pUT18-zip	P_{lac}:: leucine zipper region from yeast GCN4-*T18*	(7)
pKNT25-zip	P_{lac}:: leucine zipper region from yeast GCN4-*T25*	(7)
pUT18-^{E}YfiN	P_{lac}:: ^{E}*yfiN-T18*	This study

pUT18-^{E}FtsZ	P_{lac}:: ^{E}*ftsZ-T18*	This study
pUT18-^{E}FtsA	P_{lac}:: ^{E}*ftsA-T18*	This study
pUT18-^{E}ZipA	P_{lac}:: ^{E}*zipA-T18*	This study
pKNT25-^{E}YfiN	P_{lac}:: ^{E}*yfiN-T25*	This study
pUT18C-^{E}MreB	P_{lac}::*T18-*^{E}*mreB*	This study
pBAD33-^{E}YfiN(GGAAF)$_{GFP}$	P_{BAD}::^{E}*yfiN* (D329A E330A)-*gfp*	This study
pTrc99A-DgcA	P_{trc}::*dgcA* (amplified from pAB551)	This study
pUT18-^{E}YfiN(GGAAF)	P_{lac}:: ^{E}*yfiN* (D329A E330A)-*T18*	This study
pBAD30-DgcA	P_{BAD}::*dgcA*	This study
pBAD33-DgcA	P_{BAD}::*dgcA*	This study
pBAD33-^{E}YfiN$_{GFP}$	P_{BAD}:: ^{E}*yfiN-gfp*	This study
pTrc99A-^{E}YfiR	P_{trc}:: ^{E}*yfiR*	This study
pJN105-^{P}YfiN$_{GFP}$	P_{BAD}:: ^{P}*yfiN-gfp*	This study
pBAD30-^{P}YfiN$_{GFP}$	P_{BAD}:: ^{P}*yfiN-gfp*	This study
Phage		
P22	HT12/4int103	(1)

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