Table S1: Strains used in this study.

Collection number	Strain	Characteristics[a]	Reference or source
	Escherichia coli		
3044	DH5α λpir	*sup E44, ΔlacU169 (ΦlacZΔM15), recA1, endA1, hsdR17, thi-1, gyrA96, relA1, λpir* phage lysogen	V. de Lorenzo
	Pseudomonas putida		
1291	UWC1	Plasmid-free derivative of *P. putida* KT2440, Rif[R]	[1]
2737	UWC1-*clc*5	Derivative of strain 1291 with one ICE*clc* copy integrated into *tRNA*[gly]-5	[2]
4322	UWC1-*clc*5, Δ*mfsR*	Derivative of strain 2737 with an internal deletion in *mfsR*	[3]
5001	UWC1 *attB-echerry*	Derivative of strain 1291 (ICE*clc* free) with the mini-Tn*5 attB-echerry* conditional fluorescent trap. Used as mating recipient.	[4]
5214	UWC1-*clc*5, *lacO*ARRAY	Derivative of strain 2737 with the *lacO* array inserted within *amnB* on ICE*clc*	This study
5216	UWC1-*clc*5, Δ*mfsR*, *lacO*ARRAY	Derivative of strain 4322 with the *lacO* array inserted within *amnB* on ICE*clc*	This study
5222	UWC1-*clc*5, *lacO*ARRAY, Tn7 *araC;lacI-cfp*	Derivative of strain 5214 with a mini-Tn7 *araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5224	UWC1-*clc*5, Δ*mfsR*, *lacO*ARRAY, Tn7 *araC;lacI-cfp*	Derivative of strain 5216 with a mini-Tn7 *araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5228-5230	UWC1-*clc*5, *lacO*ARRAY, Tn7 *araC; lacI-cfp,* Tn5 P$_{inR}$-*echerry*	Derivatives of 5222 with a mini-Tn*5* P$_{inR}$-*echerry* insertion	This study
5231-5233	UWC1-*clc*5, Δ*mfsR*, *lacO*ARRAY, Tn7 *araC;lacI-cfp,* Tn5 P$_{inR}$-*echerry*	Derivatives of 5224 with a mini-Tn*5* P$_{inR}$-*echerry* insertion	This study
5235	UWC1-*clc5* Tn7 *araC;lacI-cfp*	Derivative of strain 2737 with the mini-Tn7 *araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5236	UWC1-*clc5* Δ*mfsR*, Tn7 *araC;lacI-cfp*	Derivative of strain 4322 with the mini-Tn7 *araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5248	UWC1 *attB-echerry,* Tn7 *araC;lacI-cfp*	Derivative of strain 5001 with mini-Tn7 *araC*-P$_{BAD}$-*lacI-cfp* insertion. ICE*clc* free. Used as mating recipient.	This study
5262	UWC1-*clc*5, Δ*attL*, *lacO*ARRAY, Tn7 *araC;lacI-cfp*	Derivative of strain 5222 with a deletion of the *attL* site	This study
5345	UWC1-*clc*5, Δ*mfsR*, Δ*attL*, *lacO*ARRAY	Derivative of strain 5216 with a deletion of the *attL* site	This study
5349	UWC1-*clc*5, Pp_1867-*lacO*ARRAY	Derivative of strain 2737 with the *lacO* array inserted close to Pp_1867 (12 kb upstream of ICE*clc*)	This study
5351	UWC1-*clc*5, Δ*mfsR*, Δ*attL*, *lacO*ARRAY, Tn7 *araC;lacI-cfp*	Derivative of strain 5345 with the mini-Tn7 *araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5352-5355	UWC1-*clc*5, Δ*attL*, *lacO*ARRAY, Tn7 *araC;lacI-cfp,* Tn5 P$_{inR}$-*echerry*	Derivatives of strain 5262 with a mini-Tn5 P$_{inR}$-*echerry* insertion	This study

5357-5359	UWC1-*clc*5, Δ*mfsR*, Δ*attL*, *lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp,* Tn*5* P$_{inR}$-*echerry*	Derivatives of strain 5351 with a mini-Tn*5* P$_{inR}$-*echerry* insertion	This study
5361	UWC1-*clc*5, Pp_1867-*lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp*	Derivative of strain 5349 with the mini-Tn*7 araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5451	UWC1-*clc*5, Δ*traI, lacO*$_{ARRAY}$	Derivative of strain 5214 with a deletion in the relaxase gene (*orf50240*)	This study
5466	UWC1-*clc*5, Δ*mfsR*, Δ*traI, lacO*$_{ARRAY}$	Derivative of strain 5216 with a deletion in the relaxase gene (*orf50240*)	
5468	UWC1-*clc*5, Δ*traI, lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp*	Derivative of strain 5451 with the mini-Tn*7 araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5469	UWC1-*clc*5, Δ*mfsR*, Δ*traI, lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp*	Derivative of strain 5466 with the mini-Tn*7 araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5484-5487	UWC1-*clc*5, Δ*traI, lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp,* Tn*5* P$_{inR}$-*echerry*	Derivatives of strain 5468 with a mini-Tn*5* P$_{inR}$-*echerry* insertion	This study
5488-5491	UWC1-*clc*5, Δ*mfsR*, Δ*traI, lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp,* Tn*5* P$_{inR}$-*echerry*	Derivatives of strain 5469 with a mini-Tn*5* P$_{inR}$-*echerry* insertion	This study
5588	UWC1-*clc*5, Pp_1867-*tetO*$_{ARRAY}$, *lacO*$_{ARRAY}$	Derivative of strain 5214 with the insertion of a *tetO* array close to P1867 (12 kb upstream of ICE*clc*)	This study
5589	UWC1-*clc*5, Pp_1867-*tetO*$_{ARRAY}$, Δ*mfsR*, *lacO*$_{ARRAY}$	Derivative of strain 5216 with the insertion of a *tetO* array close to P1867 (12 kb upstream of ICE*clc*)	This study
5591	UWC1-*clc*5, P1867-*tetO*$_{ARRAY}$, *lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp /tetR-yfp*	Derivative of strain 5588 with the mini-Tn*7 araC*-P$_{BAD}$-*lacI-cfp; tetR-yfp* insertion	This study
5592	UWC1-*clc*5, P1867-*tetO*$_{ARRAY}$, Δ*mfsR*, *lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp /tetR-yfp*	Derivative of strain 5589 with the mini-Tn*7 araC*-P$_{BAD}$-*lacI-cfp; tetR-yfp* insertion	This study
5597	UWC1-*clc*5, Δ*oriT1*, *lacO*$_{ARRAY}$	Derivative of strain 5214 with a deletion in *oriT1*	This study
5598	UWC1-*clc*5, Δ*oriT2*, *lacO*$_{ARRAY}$	Derivative of strain 5214 with a deletion in *oriT2*	This study
5599	UWC1-*clc*5, Δ*mfsR*, Δ*oriT1*, *lacO*$_{ARRAY}$	Derivative of strain 5216 with a deletion in *oriT1*	This study
5601-5603	UWC1-*clc*5, P1867-*tetO*$_{ARRAY}$, *lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp/tetR-yfp,* Tn*5* P$_{inR}$-*echerry*	Derivatives of strain 5591 with a mini-Tn*5* P$_{inR}$-*echerry* insertion	This study
5605 5607 5608	UWC1-*clc*5, P1867-*tetO*$_{ARRAY}$, Δ*mfsR*, *lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp/tetR-yfp,* Tn*5* P$_{inR}$-*echerry*	Derivatives of strain 5592 with a mini-Tn*5* P$_{inR}$-*echerry* insertion	This study
5647	UWC1-*clc*5, Δ*oriT1*, *lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp*	Derivative of strain 5597 with the mini-Tn*7 araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5648	UWC1-*clc*5, Δ*oriT2*, *lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp*	Derivative of strain 5598 with the mini-Tn*7 araC*-P$_{BAD}$-*lacI-cfp* insertion	This study
5712	UWC1-*clc*5 Δ*oriT1*, *lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp,* Tn*5* P$_{inR}$-*echerry*, Tn*5* compl-*oriT1*	Derivative of strain 5688 complementing deletion of *oriT1* in trans	This study
5713	UWC1-*clc*5 Δ*oriT2*, *lacO*$_{ARRAY}$, Tn*7 araC;lacI-cfp,* Tn*5* P$_{inR}$-*echerry*, Tn*5* compl-*oriT2*	Derivative of strain 5673 complementing deletion of *oriT2* in trans	This study

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