Supplementary Table 1

Experimental Models: Organisms/Strains		
IVGB578 (PAO1 *mksEF^{IN})*	This paper	WT
IVGB579 (PAO1 Δ*smc mksEF^{IN})*	This paper	Δ*smc*
PAO1	(Lagage et al., 2016)	Δ*mks*
IVGB464 (PAO1 Δ*smc)*	This paper	Δ*mks* Δ*smc*
IVGB580 (PAO1 Δ*parS mksEF^{IN})*	This paper	Δ*parS*
IVGB941(PAO1 Δ*parS123 mksEF^{IN})*	This paper	Δ*parS 123*
IVGB735 (PAO1Δ*parA mksEF^{IN}*)	This paper	Δ*parA*
IVGB655 *(*PAO1 Δ*parS mksEF^{IN}* Δ*smc)*	This paper	Δ*parS* Δ*smc*
VLB1 *(*PAO1 Δ*parS)*	(Lagage et al., 2016)	Δ*parS* Δ*mks*
IVGB982 *(*PAO1 Δ*mks::mukFEB)*	This paper	Δ*mks::mukFEB*
IVGB984 *(*PAO1 Δ*parS* Δ*mks::mukFEB)*	This paper	Δ*parS* Δ*mks::mukFEB*
IVGB988 *(*PAO1 Δ*mks::mukFEB* (IVGB982) Δ*smc)*	This paper	Δ*smc* Δ*mks::mukFEB*
IVGB717(PAO1 Δ*parS parS^{+550} mksEF^{IN})*	This paper	*parS* $^{+550}$
IVGB480 *(*PAO1 Δ*parS parS^{+550}*)	(Lagage et al., 2016)	*parS*$^{+550}$ Δ*mks*
IVGB990(PAO1 Δ*parS parS^{+550} mksEF^{IN}* Δ*smc*)	This paper	*parS*$^{+550}$ Δ*smc*
IVGB994(PAO1 Δ*parS parS^{+550}* Δ*mks::mukFEB)*	This paper	*parS*$^{+550}$ Δ*mks::mukFEB*
IVGB942(Δ*parS parS* $^{-330}$ Δ*rrnD mksEF^{IN})*	This paper	*parS*$^{-330}$
IVGB524(Δ*parS parS* $^{-330}$ Δ*rrnD)*	(Lagage et al., 2016)	*parS*$^{-330}$ Δ*mks*
IVGB991(PAO1 *oriC ins1* (IVGB398) *mksEF^{IN})*	This paper	*parS*$^{-330}$ Δ*smc*
IVGB895(PAO1 *oriC ins1* (IVGB398) *mksEF^{IN})*	This paper	*oriC ins1*
IVGB398(PAO1 *oriC ins1)*	This paper	*oriC ins1* Δ*mks*
IVGB1003(PAO1 *oriC ins1 mksEF^{IN}* Δ*smc)*	This paper	*oriC ins1* Δ*smc*

IVGB1013(PAO1 *oriC ins1* Δ*mks::mukFEB)*	This paper	*oriC ins1* Δ*mks::mukFEB*
IVGB1022 [PAO1 *oriC ins1* parST1-PA5480(92-L) tetO-PA4457(1,275-R)]	This paper	*oriC ins1* Δ*mks* 92-L & 1,275-L
IVGB1023 [PAO1 *oriC ins1 mksEF*^{IN} parST1-PA5480(92-L) tetO-PA4457(1,275-R)]	This paper	*oriC ins1* 92-L & 1,275-L
IVGB1024 [PAO1 *oriC ins1* Δ*mks::mukFEB* parST1-PA5480(92-L) tetO-PA4457(1,275-R)]	This paper	*oriC ins1* Δ*mks::mukFEB* 92-L & 1,275-L
IVGB1025 [PAO1 *oriC ins1* Δ*mks::mukFEB* parST1-PA5480(92-L) tetO-PA4027(1,006-R)]	This paper	*oriC ins1* Δ*mks::mukFEB* 92-L & 1,006-R
IVGB1026 [PAO1 Δ*mks::mukFEB* parST1-PA5480(92-L) tetO-PA4457(1,275-R)]	This paper	Δ*mks::mukFEB* 92-L & 1,275-L
IVGB1027 [PAO1 Δ*mks::mukFEB* parST1-PA5480(92-L) tetO-PA4027(1,006-R)]	This paper	Δ*mks::mukFEB* 92-L & 1,006-R
IVGB119 [PAO1 parST1-PA3573(1,509-R) tetO-PA4457(1,275-L)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,275-L & 1,509-R
IVGB120 [PAO1 parST1-PA5480(92-L) tetO-PA0069(82-R)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 3,090-L & 2,857-R
IVGB122 [PAO1 parST1-PA5480(92-L) tetO-PA0069(82-R)]	This paper	Δ*mks* 82-R & 92-L
IVGB125 [PAO1 parST1-PA3573(1,509-R) tetO-PA0981(1,812-L)]	(Vallet and Boccard, 2013)	Δ*mks* 1,509-R & 1,812-L
IVGB127 [PAO1 parST1-PA0981(1,812-L) tetO-PA4457(1,275-L)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,275-L & 1,812-L
IVGB170 [PAO1 parST1-PA0572(628-R) tetO-PA4027(1,006-R)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,006-R
IVGB174 [PAO1 parST1-PA4457(1,275-L) tetO-PA4822(851-L)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,275-L
IVGB247 [PAO1 parST1-PA1428(2,302-L) tetO-PA0981(1,812-L)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,812-L

IVGB248 [PAO1 parST1-PA1428(2,302-L) tetO-PA4457(1,275-L)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,275-L
IVGB252 [PAO1 parST1-PA3133(2,000-R) tetO-PA3573(1,509-R)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,509-R
IVGB253 [PAO1 parST1-PA3133(2,000-R) tetO-PA4027(1,006-R)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,006-R
IVGB287 [PAO1 parST1-PA0572(628-R) tetO-PA0981(1,812-L)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,812-L
IVGB288 [PAO1 parST1-PA4457(1,275-L) tetO-PA4027(1,006-R)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,275-L & 1,006-R
IVGB289 [PAO1 parST1-PA5480(92-L) tetO-PA4457(1,275-L)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,275-L
IVGB290 [PAO1 parST1-PA5480(92-L) tetO-PA0981(1,812-L)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,812-L
IVGB293 [PAO1 parST1-PA0069(82-R) tetO-PA4027(1,006-R)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,006-R
IVGB294 [PAO1 parST1-PA0069(82-R) tetO-PA3573(1,509-L)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 82-R & 1,509-L
IVGB296 [PAO1 parST1-PA2319(2,957-L) tetO-PA3573(1,509-R)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,509-R &2,957-L
IVGB297 [PAO1 parST1-PA2319(2,957-R) tetO-PA4027(1,006-R)]	(Vallet-Gely and Boccard, 2013)	Δ*mks* 1,006-R & 2,957-R
IVGB624[PAO1 *mksEF*^{IN} parST1-PA2319(2,957-R)]	This paper	WT 2,857-R
IVGB625 [PAO1 *mksEF*^{IN} parST1-PA2127(3,090-R)]	This paper	WT 3,090-L
IVGB626 [PAO1 *mksEF*^{IN} parST1-PA0069(82-R)]	This paper	WT 82-R
IVGB627 [PAO1 *mksEF*^{IN} parST1-PA5480(92-L)]	This paper	WT 92-L
IVGB634 [PAO1 Δsmc *mksEF*^{IN} parST1-PA2319(2,957-R)]	This paper	Δ*smc* 2,857-R
IVGB635 [PAO1 Δ*smc mksEF*^{IN} parST1-PA2127(3,090-R)]	This paper	Δ*smc* 3,090-L

IVGB636 [PAO1 Δ*smc mksEF*^{IN} parST1-PA0069(82-R)]	This paper	Δ*smc* 82-R
IVGB637 [PAO1 Δ*smc mksEF*^{IN} parST1-PA5480(92-L)]	This paper	Δ*smc* 92-L
IVGB642 [PAO1 Δ*smc mksEF*^{IN} parST1-PA4027(1,006-R)]	This paper	Δ*smc* 1,006-R
IVGB644 [PAO1 Δ*parS mksEF*^{IN} parST1-PA2319(2,957-R)]	This paper	Δ*parS* 2,857-R
IVGB645 [PAO1 Δ*parS mksEF*^{IN} parST1-PA2127(3,090-R)]	This paper	Δ*parS* 3,090-L
IVGB646 [PAO1 Δ*parS mksEF*^{IN} parST1-PA0069(82-R)]	This paper	Δ*parS* 82-R
IVGB647 [PAO1 Δ*parS mksEF*^{IN} parST1-PA5480(92-L)]	This paper	Δ*parS* 92-L
IVGB679[PAO1 Δ*parS mksEF*^{IN} Δ*smc* parST1-PA0069(82-R)]	This paper	Δ*parS* Δ*smc* 82-R
IVGB701 [PAO1 Δ*smc mksEF*^{IN} parST1-PA0981(1,812-L)tetO-PA3573(1,509-R)]	This paper	Δ*smc* 1,812-L & 1,509-R
IVGB702 [PAO1 Δ*smc mksEF*^{IN} parST1-PA0981(1,812-L)] tetO-PA3133(2,000-R)	This paper	Δ*smc* 1,812-L
IVGB703 [PAO1 Δ*smc mksEF*^{IN} parST1-PA4457(1,275-L) tetO-PA3573(1,509-R)]	This paper	Δ*smc* 1,275-L & 1,509-R
IVGB704 [PAO1 Δ*smc mksEF*^{IN} parST1-PA4457(1,275-R) tetO-PA4027(1,006-R)]	This paper	Δ*smc* 1,275-L & 1,006-R
IVGB705 [PAO1 *mksEF*^{IN} parST1-PA0981(1,812-L) tetO-PA3573(1,509-R)]	This paper	WT 1,509-R & 1,812-L
IVGB706 [PAO1 *mksEF*^{IN} parST1-PA0981(1,812-L) tetO-PA3133(2,000-R)]	This paper	WT 1,812-L
IVGB707 [PAO1 *mksEF*^{IN} parST1-PA4457(1,275-R) tetO-PA3573(1,509-R)]	This paper	WT 1,275-L & 1,509-R
IVGB708 [PAO1 *mksEF*^{IN} parST1-PA4457(1,275-R) tetO-PA4027(1,006-R)]	This paper	WT 1,006-R & 1275-L
IVGB709 [PAO1 Δ*parS mksEF*^{IN} parST1-PA0981(1,812-L) tetO-PA3573(1,509-R)]	This paper	Δ*parS* 1,509-R & 1,812-L

IVGB710 [PAO1 Δ*parS mksEF*^{IN} parST1-PA0981(1,812-L) tetO-PA3133(2,000-R)]	This paper	Δ*parS* 1,812-L & 2,000-R
IVGB711 [PAO1 Δ*parS mksEF*^{IN} parST1-PA4457(1,275-R) tetO-PA3573(1,509-R)]	This paper	Δ*parS* 1,275-L & 1,509-R
IVGB712 [PAO1 Δ*parS mksEF*^{IN} parST1-PA4457(1,275-R) tetO-PA4027(1,006-R)]	This paper	Δ*parS* 1,275-L & 1,006-R
IVGB754 [PAO1 *mksEF*^{IN} Δ*parA* parST1-PA2319(2,957-R)]	This paper	Δ*parA* 2,857-R
IVGB755 [PAO1 *mksEF*^{IN} Δ*parA* parST1-PA2127(3,090-R)]	This paper	Δ*parA* 3,090-L
IVGB756 [PAO1 *mksEF*^{IN} Δ*parA* parST1-PA0069(82-R)]	This paper	Δ*parA* 82-R
IVGB757 [PAO1 *mksEF*^{IN} Δ*parA* parST1-PA5480(92-L)]	This paper	Δ*parS* 92-L
IVGB840 [PAO1 Δ*parS mksEF*^{IN} parST1-PA5480(92-L) tetO-PA4457(1,275-R)]	This paper	Δ*parS* 1,275-L & 92-L
IVGB843 [PAO1 *mksEF*^{IN} parST1-PA5480(92-L) tetO-PA4457(1,275-R)]	This paper	WT 1,275-L & 92-L
IVGB855 [PAO1 ΔparS *mksEF*^{IN} parST1-PA5480(92-L) tetO-PA4027(1,006-R)]	This paper	Δ*parS* 1,006-R & 92-L
IVGB856 [PAO1 *mksEF*^{IN} parST1-PA5480(92-L) tetO-PA4027(1,006-R)]	This paper	WT 1,006-R & 92-L
IVGB923 [PAO1 *oriC ins1* parST1-PA5480(92-L) tetO-PA4027(1,006-R)]	This paper	*oriC ins1* Δ*mks* 92-L & 1006-R
IVGB931 [PAO1 *oriC ins1 mksEF*^{IN} parST1-PA5480(92-L) post pFLP2 tetO-PA4027(1,006-R)]	This paper	*oriC ins1* 92-L & 1006-R
VLB114 [PAO1 Δ*smc* parST1-PA2319(2,957-R)]	This paper	Δ*mks* Δ*smc* 2,857-R
VLB138 [PAO1 Δ*smc* parST1-PA4027(1,006-R) tetO-PA4457(1,275-L)]	This paper	Δ*mks* Δ*smc* 1,006-R & 1,275-L
VLB156 [PAO1 Δ*smc* parsT1- PA3573(1,509-R) tetO-PA0981(1,812-L)]	This paper	Δ*mks* Δ*smc* 1,509-R & 1,812-L

VLB157 [PAO1 Δ*smc* parST1-PA0981(1,812-L) tetO-PA4027(1,006-R)]	This paper	Δ*mks* Δ*smc* 1,006-R & 1,812-L
VLB158 [PAO1 Δ*smc* parST1-PA3573(1,509-R) tetO-PA4457(1,275-L)]	This paper	Δ*mks* Δ*smc* 1,509-R & 1,275-L
VLB21 [PAO1 Δ*parS* parST1-PA2319(2,957-L) tetO-PA0069(82-R)]	This paper	Δ*parS* Δ*mks* 82-R & 2,957-L
VLB40 [PAO1 Δ*smc* parST1-PA2127(3,090-L) tetO-PA0069(82-R)]	This paper	Δ*mks* Δ*smc* 82-R 3,090-L
VLB47 [PAO1 Δ*smc* parST1-PA2127(3,090-R) tetO-PA5480(92-L)]	This paper	Δ*mks* Δ*smc* 92-L & 3,090-L
Oligonucleotides		
Adapters	Marbouty et al 2015	N/A
Software and Algorithms		
Bowtie2	(Langmead and Salzberg, 2012)	http://bowtie-bio.sourceforge.net/bowtie2/index.shtml
Matlab	The MathWorks Inc	https://fr.mathworks.com/products/matlab.html
Pipeline to analyze 3C-seq data	(Lioy et al., 2018)	https://github.com/koszullab/E_coli_analysis
Plasmids		
pPSV35Ap-TetR-Cfp-yGfp-ParBT1	(Vallet-Gely and Boccard, 2013)	N/A