

Table S9. Strains, vectors and primers used in this study.

		Strains		
Code	Species	Genotype	Selection	Source
DBS3	<i>V. cholerae</i>	El Tor C6706 wild type (WT; background for all <i>V. cholerae</i> strains)	Sm	Lab collection
DBS25	<i>V. cholerae</i>	$\Delta toxR$	Sm	This study
DBS27	<i>V. cholerae</i>	$\Delta ompU$	Sm	This study
DBS517	<i>V. cholerae</i>	$\Delta lacZ$	Sm	This study
DBS455	<i>V. cholerae</i>	ΔP_{ompU}	Sm	This study
DBS72	<i>V. cholerae</i>	C6706-pBAD22	Sm	This study
DBS84	<i>V. cholerae</i>	$\Delta ompU$ -pBAD22	Cb	This study
DBS394	<i>V. cholerae</i>	$\Delta toxR$ -pBAD22	Cb	This study
DBS444	<i>V. cholerae</i>	$\Delta ompU$ -pBAD-OueS ^{C6706}	Cb	This study
DBS448	<i>V. cholerae</i>	$\Delta ompU$ -pBAD-OueS ^{GBE1114}	Cb	This study
DBS396	<i>V. cholerae</i>	$\Delta ompU$ -pOmpU ^{C6706}	Cb	This study
DBS465	<i>V. cholerae</i>	$\Delta ompU$ -pOmpU ^{GBE1114}	Sm	This study
DBS310	<i>V. cholerae</i>	$\Delta ompU::OmpU$ ^{GBE1114}	Sm	This study
DBS391	<i>V. cholerae</i>	$\Delta ompU$ -pNS	Cb	This study
DBS593	<i>V. cholerae</i>	$\Delta ompU$ -pOueS 5'-mut	Cb	This study
DBS595	<i>V. cholerae</i>	$\Delta ompU$ -pOueS 3'-mut	Cb	This study
DBS590	<i>V. cholerae</i>	$\Delta ompU$ -pOueS FL-mut	Cb	This study
DBS394	<i>V. cholerae</i>	$\Delta toxR$ -pBAD22	Cb	This study
DBS410	<i>V. cholerae</i>	$\Delta toxR$ -pOmpU ^{C6706}	Cb	This study
DBS457	<i>V. cholerae</i>	$\Delta toxR$ -pOueS ^{C6706}	Cb	This study
DBS408	<i>V. cholerae</i>	$\Delta toxR$ -pNS	Cb	This study
DBS601	<i>V. cholerae</i>	$\Delta toxR$ -pOueS 5'-mut	Cb	This study
DBS603	<i>V. cholerae</i>	$\Delta toxR$ -pOueS 3'-mut	Cb	This study
DBS599	<i>V. cholerae</i>	$\Delta toxR$ -pOueS FL-mut	Cb	This study
DBS539	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS ^{C6706}	Sm	This study
DBS560	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS 5'-mut	Sm	This study
DBS582	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS 3'-mut	Sm	This study
DBS584	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS FL-mut	Sm	This study
DBS550	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS ^{GBE1114}	Sm	This study
DBS571	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS ^{GBE0428}	Sm	This study
DBS572	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS ^{IRL0181}	Sm	This study
DBS596	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS ^{GBE1116}	Sm	This study
DBS586	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS ^{GBE1194}	Sm	This study
DBS588	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₀ -OueS ^{IRL0074}	Sm	This study
DBS488	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₁₀ -OueS ^{C6706}	Sm	This study
DBS489	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₂₀ -OueS ^{C6706}	Sm	This study
DBS491	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₃₀ -OueS ^{C6706}	Sm	This study
DBS493	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₄₀ -OueS ^{C6706}	Sm	This study
DBS495	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₅₀ -OueS ^{C6706}	Sm	This study
DBS509	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₆₀ -OueS ^{C6706}	Sm	This study
DBS499	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₈₀ -OueS ^{C6706}	Sm	This study
DBS512	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₉₀ -OueS ^{C6706}	Sm	This study
DBS501	<i>V. cholerae</i>	$\Delta ompU$ -P _{ompU} ::P ₁₀₀ -OueS ^{C6706}	Sm	This study
DBS16	<i>E. coli</i>	<i>E. coli</i> S17-1 λpir	--	Lab collection
DBS18	<i>E. coli</i>	<i>E. coli</i> S17-1 λpir -pKAS154	Kan	Lab collection
DBS19	<i>E. coli</i>	<i>E. coli</i> S17-1 λpir -pBAD22	Cb	Lab collection
SM80	<i>E. coli</i>	pKAS154 $\Delta toxR$	Kan	Lab collection
SM125	<i>E. coli</i>	pKAS154 $\Delta ompU$	Kan	Lab collection
DBS513	<i>E. coli</i>	pKAS154 $\Delta lacZ$	Kan	This study
DBS440	<i>E. coli</i>	pKAS154 ΔP_{ompU}	Kan	This study
DBS393	<i>E. coli</i>	pBAD-OmpU ^{C6706}	Cb	This study
DBS454	<i>E. coli</i>	pOmpU ^{GBE1114}	Cb	This study
DBS388	<i>E. coli</i>	pBAD-NS	Cb	This study
DBS521	<i>E. coli</i>	pKAS154 $\Delta ompU$ -P _{ompU} -P ₀ -OueS ^{C6706}	Kan	This study
DBS470	<i>E. coli</i>	pKAS154 $\Delta ompU$ -P _{ompU} -P ₁₀ -OueS ^{C6706}	Kan	This study

DBS471	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₂₀ OueS ^{C6706}	Kan	This study
DBS472	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₃₀ OueS ^{C6706}	Kan	This study
DBS473	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₄₀ OueS ^{C6706}	Kan	This study
DBS474	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₅₀ OueS ^{C6706}	Kan	This study
DBS475	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₇₀ OueS ^{C6706}	Kan	This study
DBS476	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₈₀ OueS ^{C6706}	Kan	This study
DBS505	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₉₀ OueS ^{C6706}	Kan	This study
DBS477	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₁₀₀ OueS ^{C6706}	Kan	This study
DBS546	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₀ OueS-5' mut	Kan	This study
DBS577	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₀ OueS-3' mut	Kan	This study
DBS579	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₀ OueS-FL mut	Kan	This study
DBS540	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₀ OueS ^{GBE1114}	Kan	This study
DBS561	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₀ OueS ^{GBE0428}	Kan	This study
DBS562	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₀ OueS ^{IRL0181}	Kan	This study
DBS564	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₀ OueS ^{GBE1116}	Kan	This study
DBS565	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₀ OueS ^{GBE1194}	Kan	This study
DBS566	<i>E. coli</i>	pKAS154 Δ ompU- P _{ompU} -P ₀ OueS ^{IRL0074}	Kan	This study

Plasmid	Plasmids	
	Notes	Selection
pBAD22	Ectopic expression	Cb
pBAD-OmpU ^{C6706}	Ectopic expression	Cb
pBAD-OmpU ^{GBE1114}	Ectopic expression	Cb
pBAD-Non-specific (NS)	Ectopic expression	Cb
pBAD-OueS ^{C6706}	Ectopic expression	Cb
pBAD-OueS 5'-mut	Ectopic expression	Cb
pBAD-OueS 3'-mut	Ectopic expression	Cb
pBAD-OueS FL-mut	Ectopic expression	Cb
pKAS154	Allelic exchange	Kan
pKAS-OueS ^{C6706}	Allelic exchange	Kan
pKAS- Δ ompU	Allelic exchange	Kan
pKAS- Δ toxR	Allelic exchange	Kan
pKAS- Δ lacZ	Allelic exchange	Kan
pKAS- Δ P _{ompU}	Allelic exchange	Kan
pKAS- Δ P _{ompU}	Allelic exchange	Kan
pKAS-P ₁₀ OueS ^{C6706}	Allelic exchange	Kan
pKAS-P ₂₀ OueS ^{C6706}	Allelic exchange	Kan
pKAS-P ₃₀ OueS ^{C6706}	Allelic exchange	Kan
pKAS-P ₄₀ OueS ^{C6706}	Allelic exchange	Kan
pKAS-P ₅₀ OueS ^{C6706}	Allelic exchange	Kan
pKAS-P ₆₀ OueS ^{C6706}	Allelic exchange	Kan
pKAS-P ₈₀ OueS ^{C6706}	Allelic exchange	Kan
pKAS-P ₉₀ OueS ^{C6706}	Allelic exchange	Kan
pKAS-P ₁₀₀ OueS ^{C6706}	Allelic exchange	Kan
pKAS-OueS ^{GBE1114}	Allelic exchange	Kan
pKAS-OueS ^{GBE0428}	Allelic exchange	Kan
pKAS-OueS ^{IRL0181}	Allelic exchange	Kan
pKAS-OueS ^{GBE1116}	Allelic exchange	Kan
pKAS-OueS ^{GBE1194}	Allelic exchange	Kan
pKAS-OueS ^{IRL0074}	Allelic exchange	Kan

Name	Primers	
	Sequence	Use
DB215	ctaggaAGATCTaaaatgattggctaatttgcgaa	PompU USF
DB216	ataagaatGCGGCCGagattgagcaaaatgcacgcaatc	PompU USR
DB217	ataagaatGCGGCCGatggacaataaattaggacttaa	PompU DSF

DB218	ccgccgGAATTC gaaacgttgctgcagtataacga	PompU DSR
DB219	tcagccaatggatgaaaaaggctcg	PompU FikF
TG28	GCGGCAGTCAATGGTGTGTTG	OmpU Fik Rev
DB220	ctaggaAGATCT acttggctagaaccggggccaggaa	Δ lacZ US-F
DB221	ataagaa tGCGGCCGCcctcaagccgaggagtaagaagt	Δ lacZ US-R
DB222	ataagaa tGCGGCCGCtaagccagagagccttaaggctctctttttgt	Δ lacZ DS-F
DB223	ccgccgGAATTC gtcaaggacatagaaacattgcttg	Δ lacZ DS-R
DB224	gcacggaggggaagggtaaaaccgag	Δ lacZ Fik F
DB225	acgccaacgaggtaaaaacgctggt	Δ lacZ Fik R
DB226	ctagcGAATTC gccaaacttccgctcttacatctc	OueS-C6706 Fwd
DB228	ctagcAAGCTT TAGAAAAACGCCTGCTAGTGAGCA	OueS-C6706 Rev
DB249	ccatGAGCTC gccaaacttccgctcttaca	OueS-0
DB233	ccatGAGCTC actacttcaagccaaacttc	OueS-10
DB234	ccatGAGCTC gacgcaacttactacttcaa	OueS-20
DB235	ccatGAGCTC ttttgctatcgacgcaactt	OueS-30
DB236	ccatGAGCTC cagcagataattttgctatc	OueS-40
DB237	ccatGAGCTC aaagaaacttcagcagataa	OueS-50
DB239	ccatGAGCTC cacaacaatgcagaaacagcg	OueS-70
DB240	ccatGAGCTC actgacatacaacaatgc	OueS-80
DB241	ccatGAGCTC agctgcgtttactgcgacat	OueS-90
DB242	ccatGAGCTC aactaggtcaagctgcgttt	OueS-100
DB243	ccgccgGAATTC gggtggggtcgctgaaaagcg	Reverse primer for OueS
DB256	ccatGAGCTC ACCTAATTTTCGGTCATATA	OueS-P ₀ -5'mut
DB199	ctagcGAATTC agcggttacggtcagcaaac	Non-specific locus Fwd
DB200	ctagcAAGCTT tggatcgggtggcacttac	Non-specific locus Rev
DB271	ccgccgGAATTC ACCTAATTTTCGGTCATATA	OueSFL-mutF
DB272	ctagcAAGCTT TAGTAATACTCGAGCAAGAG	OueSFL-mutR
DB273	ccgccgGAATTC GCCAAACTTCCGCTCTTACA	OueS3'-mutF
DB274	ctagcAAGCTT TAGAAGTCAAGTAGGAT	OueS3'-mutR
DB195	GATTACGCCAAGCTT ccgctcttacatctcttaccagttcaatctgctag	for 3' RACE
DB196	GATTACGCCAAGCTT tcgtaacgtagaccgatagccagttcgtct	For 5' RACE
DB164	GGGGGGGAATTCTTTTTTTTTTT	RACE primer
DB133	ctgaggttaattataaaccggg	pKAS32 MCS Fik F
DB134	GGACAACAAGCCAGGGATGT	pKAS32 MCS Fik R
GR13	atgccatagcatttttatcc	pBAS MCS flank
GR14	gatttaaatctgtatcagg	pBAS MCS flank