

Supplementary Tables

Table S1. Bacterial strains and plasmids used in this study

Name	Relevant genotype or description	Reference
Strains		
<i>Xcc</i>		
<i>Xcc</i> 8004	A wild-type <i>Xcc</i> strain, a laboratory strain with spontaneous rifampicin-resistance	[1]
$\Delta XC1214$	Full length deletion of <i>XC1214</i>	This study
$\Delta lac5$	Deletion mutant of <i>XC1003</i> , <i>XC2985</i> , <i>XC4208</i> , <i>XC2481</i> , <i>XC1708</i>	This study
$\Delta lac6$	Deletion of <i>XC4194</i> in $\Delta lac5$	This study
$\Delta lac7$	Deletion of <i>XC1218</i> in $\Delta lac6$	This study
$\Delta lac8$	Deletion of <i>XC1214</i> in $\Delta lac7$	This study
<i>E. coli</i>		
DH5 α	F ⁻ $\Phi 80$ <i>lacZ</i> Δ M15 $\Delta(lacZYA-argF)$ U169 <i>recA1</i> <i>endA1</i> <i>hsdR</i> 17(r _k ⁻ , m _k ⁺) <i>phoA</i> <i>supE</i> 44 <i>thi</i> -1 <i>gyrA</i> 96 <i>relA1</i> λ ⁻	[2]
Plasmids		
pQE80L	Expression vector, Amp ^R	Qiagen
pK18 <i>mobsacB</i>	Suicide plasmid in <i>Xanthomonas</i> , Kan ^R	[3]
pHM1	broad-host range vector	[4]
pK18- <i>XC1003</i>	pK18 <i>mobsacB</i> based plasmid for <i>XC1003</i> deletion	This study
pK18- <i>XC2985</i>	pK18 <i>mobsacB</i> based plasmid for <i>XC2985</i> deletion	This study
pK18- <i>XC4208</i>	pK18 <i>mobsacB</i> based plasmid for <i>XC4208</i> deletion	This study
pK18- <i>XC2481</i>	pK18 <i>mobsacB</i> based plasmid for <i>XC2481</i> deletion	This study
pK18- <i>XC1708</i>	pK18 <i>mobsacB</i> based plasmid for <i>XC1708</i> deletion	This study
pK18- <i>XC4194</i>	pK18 <i>mobsacB</i> based plasmid for <i>XC4194</i> deletion	This study

pK18-XC1218	pK18 <i>mobsacB</i> based plasmid for XC1218 deletion	This study
pK18-XC1214	pK18 <i>mobsacB</i> based plasmid for XC1214 deletion	This study
pQE-XC1003	pQE80L based plasmid for XC1003 expression in <u><i>E. coli</i></u>	This study
pQE-XC2985	pQE80L based plasmid for XC2985 expression in <u><i>E. coli</i></u>	This study
pQE-XC4208	pQE80L based plasmid for XC4208 expression in <u><i>E. coli</i></u>	This study
pQE-XC2481	pQE80L based plasmid for XC2481 expression in <u><i>E. coli</i></u>	This study
pQE-XC1708	pQE80L based plasmid for XC1708 expression in <u><i>E. coli</i></u>	This study
pQE-XC4194	pQE80L based plasmid for XC4194 expression in <u><i>E. coli</i></u>	This study
pQE-XC1218	pQE80L based plasmid for XC1218 expression in <u><i>E. coli</i></u>	This study
pQE-XC1214	pQE80L based plasmid for XC1214 expression in <u><i>E. coli</i></u>	This study
pQE-XC1003	pQE80L based plasmid for XC1003 expression in <u><i>E. coli</i></u>	This study
pQE-XC2985	pQE80L based plasmid for XC2985 expression in <u><i>E. coli</i></u>	This study
pQE-XC4208	pQE80L based plasmid for XC4208 expression in <u><i>E. coli</i></u>	This study
pQE-XC2481	pQE80L based plasmid for XC2481 expression in <u><i>E. coli</i></u>	This study
pQE-XC1708	pQE80L based plasmid for XC1708 expression in <u><i>E. coli</i></u>	This study
pQE-XC4194	pQE80L based plasmid for XC4194 expression in <u><i>E. coli</i></u>	This study
pQE-XC1218	pQE80L based plasmid for XC1218 expression in <u><i>E. coli</i></u>	This study
pQE-XC1214	pQE80L based plasmid for XC1214 expression in <u><i>E. coli</i></u>	This study
pQE-XC1214E186A	E186A mutant of pQE-XC1214	This study
pHM-XC1003	pHM1 based plasmid for XC1003 expression in <u><i>Xcc</i></u>	This study
pHM-XC2985	pHM1 based plasmid for XC2985 expression in <u><i>Xcc</i></u>	This study
pHM-XC4208	pHM1 based plasmid for XC4208 expression in <u><i>Xcc</i></u>	This study
pHM-XC2481	pHM1 based plasmid for XC2481 expression in <u><i>Xcc</i></u>	This study
pHM-XC1708	pHM1 based plasmid for XC1708 expression in <u><i>Xcc</i></u>	This study

pHM-XC4194	pHM1 based plasmid for XC4194 expression in <u>Xcc</u>	This study
pHM-XC1218	pHM1 based plasmid for XC1218expression in <u>Xcc</u>	This study
pHM-XC1214	pHM1 based plasmid for XC1214 expression in <u>Xcc</u>	This study

Amp^R and Kan^R indicate resistance to ampicillin and Kanamycin, respectively

Table S2. Oligonucleotide primers used in this study

Name	Sequence(5'-3')	Application
For deletion		
XC1003ddFF	GGTCAAGCTTGTGCGCATTGCAGGTCTAGGT	XC1003 deletion
XC1003ddFR	AGCAGGTACCTTCGAGCTGCCAGCCATCTG	
XC1003ddRF	AGCAGGTACCGAGCCGCACCGTGGAGATTCTG	
XC1003ddRR	GGTCGAATTCCGAATCGGTGATGGTGACGTC	
XC2985ddFF	GGTCAAGCTTGCAACGCCAAGCTGTTCAATG	XC2985 deletion
XC2985ddFR	AGCAGGTACCCAGCGTGTTTTGCAGCTGCTG	
XC2985ddRF	AGCAGGTACCGCAGCGCTGCATCTGCAGGCT	
XC2985ddRR	GGTCGAATTCAGGACAAGCGGTCATCTGCTC	
XC4208ddFF	GGTCAAGCTTGGTGGGCTTCAACGACGACAC	XC4208deletion
XC4208ddFR	AGCAGGTACCGGTAGTGCAGAGGCAGATCAG	
XC4208ddRF	AGCAGGTACCCATGTGCAATCCGACACGCTG	
XC4208ddRR	GGTCGAATTCGGCCAACGATGAACATGCCAC	
XC2481ddFF	GGTCAAGCTTCATGTGGCCTACGGCGAAAC	XC2481 deletion
XC2481ddFR	AGCAGGTACCCAGGGAAGACAACAGCAACG	
XC2481ddRF	AGCAGGTACCTCCAGTGCACCGCAGCTGCTC	
XC2481ddRR	GGTCGAATTCATCGACCACCTGCAGACGCAC	
XC1218ddFF	GGTCAAGCTTCAGGGTCTGCGCCACTGTGTC	XC1218 deletion
XC1218ddFR	AGCATCTAGAGGGTGCAGGAACACGACGGTG	
XC1218ddRF	AGCATCTAGACGAGAGCAAATGACGTTGCAG	
XC1218ddRR	GGTCGAATTCCTCGCTCCACCATTCTGAGG	
XC1214ddFF	GGTCAAGCTTGCAACTACGTACTCGGCAGC	XC1214 deletion
XC1214ddFR	AGCATCTAGACAAGCGTGGTACGCAACATG	
XC1214ddRF	AGCATCTAGACAGCAGCAGGTGTGGATCAC	
XC1214ddRR	GGTCGAATTCCTGAGCGAGATCGCACCAG	
XC1708ddFF	GGTCAAGCTTGTCGGCATCTATGGTGCCTC	XC1708 deletion
XC1708ddFR	AGCATCTAGACAGCATGCAGAGCAGCACTT	
XC1708ddRF	AGCATCTAGACCAGCTCAACGGCGACCAGA	
XC1708ddRR	GGTCGAATTCCTCAGCACGTCCAACAGGCTG	
XC4194ddFF	GGTCAAGCTTCCACCGTGCTGATCACAACG	XC4194 deletion
XC4194ddFR	AGCATCTAGATGCCACCCGTGTCCGTGCAC	
XC4194ddRF	AGCATCTAGAGTGCACCTTGACGACCGCA	
XC4194ddRR	GGTCGAATTCGTCGCTGTTTTCGGCGATG	
For clone into pQE80L		

XC1003QEF	GATCGCATCACCATCACCATCACGGATCCGCT GGGCAGCTCGAACCGCA	<u>XC1003 gene for expression</u>
XC1003QER	CAGGAGTCCAAGCTCAGCTAATTAAGCTTACA CGGCATAGCAACTGCAAG	
XC2985QEF	GATCGCATCACCATCACCATCACGGATCCGAC CAGCAGCAGCTGCAAAAC	<u>XC2985 gene for expression</u>
XC2985QER	CAGGAGTCCAAGCTCAGCTAATTAAGCTTAGT GGTCGACGTTTCAGTCGAC	
XC4208QEF	GATCGCATCACCATCACCATCACGGATCCGCG CTGATCTGCCTCTGCAC	<u>XC4208 gene for expression</u>
XC4208QER	CAGGAGTCCAAGCTCAGCTAATTAAGCTTAGT AACTGAGCGAGCGACCAC	
XC2481QEF	GATCGCATCACCATCACCATCACGGATCCTCC ATGCATTCCCCCGTTGC	<u>XC2481 gene for expression</u>
XC2481QER	CAGGAGTCCAAGCTCAGCTAATTAAGCTTACA GTAGTTTTGATAGCTGCT	
XC1218QEF	GATCGCATCACCATCACCATCACGGATCCTCC CTGTCCCGCCACCGTCG	<u>XC1218 gene for expression</u>
XC1218QER	CAGGAGTCCAAGCTCAGCTAATTAAGCTTAGT GCAGCGAACTGCAACGTC	
XC1214QEF	GATCGCATCACCATCACCATCACGGATCCATG TTGCGTACCACGCTTGC	<u>XC1214 gene for expression</u>
XC1214QER	CAGGAGTCCAAGCTCAGCTAATTAAGCTTACTT ACTCCTTCGGCGTGATC	
XC1708QEF	<u>GATCGCATCACCATCACCATCACGGATCCCGC</u> CTGTTTCTTTCCCGTGG	<u>XC1708 gene for expression</u>
XC1708QER	CAGGAGTCCAAGCTCAGCTAATTAAGCTTACTA CGCGTTCAGTAGCTGCC	
XC4194QEF	GATCGCATCACCATCACCATCACGGATCCAGT GCACGGACACGGGTGGCA	<u>XC4194 gene for expression</u>
XC4194QER	CAGGAGTCCAAGCTCAGCTAATTAAGCTTAGA GTGACGGTCTGTGACATC	
For mutation		
Xc1214E186A R	GTTCTCTACCTGCACGGCGA	Mutation of E ¹⁸⁶ to A ¹⁸⁶ of XC1214
Xc1214E186A F	GCATACGGCTCCTACGACGAC	
For clone into pHM1		
QephMF	ACAGCTATGACCATGATTACGCCAAGCTTCGA GGCCCTTTCGTCTTCAC	Amplification of the gene from the respective expression plasmid pQE80I
QephMR	GACGTTGTAAAACGACGGCCAGTGAATTCCAA CGGTGGTATATCCAGTG	

*All primers were designed based on *Xcc* strain 8004; Restriction enzyme sites are underlined.

References

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