

Strains and plasmids:

Strain	Description	Source
DH5 α	<i>deoR endA1 gyrA96 hsdR17 (rk-mk+)recA1 relA1 supE44 thi-1 Δ(lacZYA-argF)U169 Φ80lacZ ΔM15F - λ</i>	Lab stock
BL21(DE3)	F- <i>ompT hsdS(rB-mB-) gal dcm</i> (DE3)	Lab stock
Plasmid		
pYB1a-eGFP	Ampicillin resistance, Green fluorescent protein	this study
pYB1a-PobR-eGFP-Cmr	Ampicillin resistance, PobR gene, Green fluorescent protein, Chloramphenicol resistance	this study
pYB1a-PobRmut (P5-B7) -eGFP-Cmr	Ampicillin resistance, PobR gene containing mutations encoding E16V, E124G, H125R respectively, Chloramphenicol resistance, Green fluorescent protein	this study
pYB1a-PobRmut (P7-E8) -eGFP-Cmr	Ampicillin resistance, PobR gene containing mutations encoding L122P, E126V respectively, Chloramphenicol resistance, Green fluorescent protein	this study

pLT1k-MP6	Kanamycin resistance, for <i>E.coli</i> genome mutant	Lab stock
pRB1s-HmaS- aroG-pheA	Streptomycin resistance, HMA synthetic genes	Lab stock

Primers:

No.	Primer	Sequence (5' to 3') (Bold letters indicate mutation sites)	Use
1	Spm16-F	CGGTACGGATCACTTCCGAG CTATGTGGGTGAG	Site-directed mutagenesis of PobR to introduce E16V.
2	Spm16-R	ATCCGTACCGAAGATTACAT CGCCGGTCTG	Site-directed mutagenesis of PobR to introduce E16V.
3	Spm122-F	CGTGCTCGTCTGGGACAACG ATTGAGAAGGTCAG	Site-directed mutagenesis of PobR to introduce L122P.
4	Spm122-R	AGACGAGCACGAGGTGGTG CCGGTTG	Site-directed mutagenesis of PobR to introduce L122P.
5	Spm124-F	CCACCTCGTGCCCGTCTAGG ACAACGATTGAGA	Site-directed mutagenesis of PobR to introduce E124G.
6	Spm124-R	CACGAGGTGGTGCCGGTTGC CAGAAGCTAT	Site-directed mutagenesis of PobR to introduce E124G.
7	Spm125-F	GCACCACCTCGCGCTCGTCT AGGACAACGATTG	Site-directed mutagenesis of PobR to introduce H125R.
8	Spm125-R	GAGGTGGTGCCGGTTGCCAG AAGCTATCTG	Site-directed mutagenesis of PobR to introduce H125R.
9	Spm126-F	CGGCACCACCACGTGCTCGT CTAGGACAACG	Site-directed mutagenesis of PobR to introduce E126V.
10	Spm126-R	GGTGGTGCCGGTTGCCAGAA GCTATCTGCC	Site-directed mutagenesis of PobR to introduce E126V.

11	PobR- Gibson-F	AATTGTCTGATTCGTTACCA ATTAACCAAGTTGCGCAGT TC	Construction of plasmid pYB1a- PobR
12	PobR- Gibson-R	AGCTCCTCGCCCTTGGACAT ATGTATATCTCCTTGCTAT	Construction of plasmid pYB1a- PobR
13	pYB1a- Gibson-F	ATGTCCAAGGGCGAGGAGC TGTTACCGGGGT	Construction of plasmid pYB1a- PobR
14	pYB1a- Gibson-R	TGGTAACGAATCAGACAATT GACGGCTTG	Construction of plasmid pYB1a- PobR
15	Chl-F	ATGTCCAAGGGCGAGGAGC TGTTACCGGGGT	Construction of plasmid pYB1a- PobR
16	Chl-R	TGGTAACGAATCAGACAATT GACGGCTTG	Construction of plasmid pYB1a- PobR
17	PobR- mut-F	TTAAACCAAGTTGCGCAGTT CAT	Construction of plasmid pYB1a- PobR-eGFP-Chl
18	PobR- mut-R	ATGGAACAGCATCACCAAT ATCTAG	Construction of plasmid pYB1a- PobR-eGFP-Chl
