

S3 Table. Bacterial strains and plasmids used in this study.

Strain or plasmid	Relevant characteristics	Source
<i>E. coli</i>		
DH5 α	<i>F</i> ⁻ ϕ 80 <i>lacZ</i> Δ M15 Δ (<i>lacZYA-argF</i>)U169 <i>recA1 endA1 hsdR17</i> (<i>rk</i> ⁻ , <i>mk</i> ⁺) <i>phoA supE44 thi-1 gyrA96 relA1 tonA</i>	Stratagene
BL21 (DE3)	<i>F</i> ⁻ <i>ompT hsdS_B</i> (<i>rB</i> ⁻ <i>mB</i> ⁻) <i>gal dcm met</i> (DE3)	Invitrogen
<i>P. aeruginosa</i>		
PAO1	Wild type	This lab
Δ <i>retS</i>	<i>retS</i> deletion mutant of PAO1	This lab
Δ <i>retS</i> Δ <i>clpV2</i>	<i>retSclpV2</i> deletion mutant of PAO1	This study
Δ <i>retS</i> Δ <i>hcp2</i>	<i>retShcp2</i> deletion mutant of PAO1	This study
Δ <i>retS</i> Δ <i>tssM2</i>	<i>retStssM2</i> deletion mutant of PAO1	This study
Δ <i>retS</i> Δ <i>svgrG2a</i>	<i>retSvgrG2a</i> deletion mutant of PAO1	This study
Δ <i>retS</i> Δ <i>svgrG2b</i>	<i>retSvgrG2b</i> deletion mutant of PAO1	This study
Δ <i>retS</i> Δ <i>clpV1</i>	<i>retSclpV1</i> deletion mutant of PAO1	This study
Δ <i>retS</i> Δ <i>clpV3</i>	<i>retSclpV3</i> deletion mutant of PAO1	This study
Δ <i>retS</i> Δ <i>clpV123</i>	<i>retSclpV1clpV2clpV3</i> deletion mutant of PAO1	This study
Δ <i>clpV2</i>	<i>clpV2</i> deletion mutant of PAO1	This study
Δ <i>azu</i>	<i>azu</i> deletion mutant of PAO1	This study
Δ <i>oprC</i>	<i>oprC</i> deletion mutant of PAO1	This study
Δ <i>cueR</i>	<i>cueR</i> deletion mutant of PAO1	This study
Δ <i>cueR</i> Δ <i>clpV2</i>	<i>cueRclpV2</i> deletion mutant of PAO1	This study
Plasmids		
pET28a	T7 <i>lac</i> promoter-operator, N-terminal His tag, Kan ^r	Novagen
pGEX6p-1	Expression vector with N-terminal GST tag, Ap ^r	Novagen
pEX18Ap	<i>oriT</i> ⁺ <i>sacB</i> ⁺ gene replacement vector with multiple-cloning site from pUC18; Ap ^r	1
pAK1900	<i>E. coli-P. aeruginosa</i> shuttle cloning vector carrying <i>plac</i> upstream of MCS; Ap ^r , Cb ^r	2
mini-CTX- <i>lacZ</i>	Integration plasmid; Tc ^r	3
pMMB67H	<i>E. coli-P. aeruginosa</i> shuttle cloning vector; Ap ^r , Cb ^r	4
pUCp26	<i>E. coli-P. aeruginosa</i> shuttle cloning vector; Tc ^r	5
pET28a- <i>oprC</i>	Protein expression construct, the entire gene of <i>oprC</i> cloned in pET28a vector	This study
pGEX6p-1- <i>azu</i>	Protein expression construct, the entire gene of <i>azu</i> cloned in pGEX-6p-1 vector	This study
pGEX6p-1- <i>cueR</i>	Protein expression construct, the entire gene of <i>cueR</i> cloned in pGEX-6p-1 vector	This study
pEX- <i>clpV2</i>	<i>clpV2</i> deletion plasmid, pEX18Ap with upstream and downstream region of <i>clpV2</i> ; Ap ^r	This study
pEX- <i>hcp2</i>	<i>hcp2</i> deletion plasmid, pEX18Ap with upstream and downstream region of <i>hcp2</i> ; Ap ^r	This study
pEX- <i>tssM2</i>	<i>tssM2</i> deletion plasmid, pEX18Ap with upstream region and	This study

pEX- <i>clpV1</i>	downstream region of <i>tssM2</i> ; Ap ^r <i>ClpV1</i> deletion plasmid, pEX18Ap with upstream and downstream region of <i>clpV1</i> ; Ap ^r	This study
pEX- <i>clpV3</i>	<i>clpV3</i> deletion plasmid, pEX18Ap with upstream and downstream region of <i>clpV3</i> ; Ap ^r	This study
pEX- <i>vgrG2a</i>	<i>VgrG2a</i> deletion plasmid, pEX18Ap with upstream and downstream region of <i>clpV3</i> ; Ap ^r	This study
pEX- <i>vgrG2b</i>	<i>vgrG2b</i> deletion plasmid, pEX18Ap with upstream and downstream region of <i>clpV3</i> ; Ap ^r	This study
pEX- <i>azu</i>	<i>azu</i> deletion plasmid, pEX18Ap with upstream and downstream region of <i>azu</i> ; Ap ^r	This study
pEX- <i>oprC</i>	<i>oprC</i> deletion plasmid, pEX18Ap with upstream and downstream of <i>oprC</i> ; Ap ^r	This study
mini-CTX- <i>oprC</i>	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>oprC</i> gene; Tc ^r	This study
mini-CTX- <i>hcp2</i> -Flag	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>hcp2</i> gene and the 3x <i>flag</i> sequence; Tc ^r	This study
mini-CTX- <i>oprC</i> -Flag	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>oprC</i> gene and the 3x <i>flag</i> sequence; Tc ^r	This study
mini-CTX- <i>azu</i> -Flag	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>azu</i> gene and the 3x <i>flag</i> sequence; Tc ^r	This study
mini-CTX- <i>azu_{ss}</i> -Flag	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>azu</i> gene lack the N-terminal signal peptide and the 3x <i>flag</i> sequence; Tc ^r	This study
mini-CTX- <i>tssA2</i> -Flag	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>tssA2</i> gene and the 3x <i>flag</i> sequence; Tc ^r	This study
mini-CTX- <i>PA0943</i> -Flag	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>PA0943</i> gene and the 3x <i>flag</i> sequence; Tc ^r	This study
mini-CTX- <i>xcpP</i> -Flag	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>xcpP</i> gene and the 3x <i>flag</i> sequence; Tc ^r	This study
mini-CTX- <i>ctpA</i> -Flag	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>ctpA</i> gene and the 3x <i>flag</i> sequence; Tc ^r	This study
mini-CTX- <i>lacZ-clpV2-sfGFP</i>	Expression plasmid, mini-CTX- <i>lacZ</i> containing the entire <i>clpV2</i> gene fused with <i>sfGFP</i> sequence; Tc ^r	This study
pMMB67H- <i>vgrG2b</i> -Flag	Expression plasmid, pMMB67H containing the entire <i>vgrG2b</i> gene and the 3x <i>flag</i> sequence; Ap ^r , Cb ^r	This study
pMMB67H- <i>pldA</i> -Flag	Expression plasmid, pMMB67H containing the entire <i>pldA</i> gene and the 3x <i>flag</i> sequence; Ap ^r , Cb ^r	This study
pMMB67H- <i>oprC</i> -His ₆	Expression plasmid, pMMB67H containing the entire <i>oprC</i> gene and the 3x his sequence; Ap ^r , Cb ^r	This study
pAK- <i>clpV2</i>	pAK1900 with the entire <i>clpV2</i> gene; Ap ^r	This study
pAK- <i>clpV2_{2E}</i>	pAK1900 with the site-directed mutant <i>clpV2</i> gene; Ap ^r	This study
pAK- <i>hcp2</i>	pAK1900 with the entire <i>hcp2</i> gene; Ap ^r	This study

pAK- <i>tssM2</i>	pAK1900 with the entire <i>tssM2</i> gene; Ap ^r	This study
pAK- <i>cueR</i>	pAK1900 with the entire <i>cueR</i> gene; Ap ^r	This study
pAK- <i>azu</i>	pAK1900 with the entire <i>azu</i> gene; Ap ^r	This study
pUCp26- <i>retS</i>	pUCp26 with the entire <i>retS</i> gene; Tc ^r	This lab
pUCp26- <i>clpV2</i>	pUCp26 with the entire <i>clpV2</i> gene; Tc ^r	This study

Reference

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