

Supplementary Materials

Table S1: *Pseudomonas* sp. phDV1 strains used in this study.

Strains	Features	Reference
<i>Pseudomonas</i> sp. phDV1	Wild-type	[9,32,33]
Δ phaZ	<i>Pseudomonas</i> sp. phDV1 Δ phaZ::Kan ^r	This work
Δ phaR	<i>Pseudomonas</i> sp. phDV1 Δ phaR::Kan ^r	This work

Table S2: Plasmids used in this study.

Plasmids	Features	Reference
pMiniT 2.0	Blunt cloning plasmid	NEB
pMK-RedS	pBBR1MCS derivative; <i>gam</i> , <i>bet</i> , and <i>exo</i> from pUCP18-RedS cloned into pBBR1MCS, Cam ^r	[36]
pMini- Δ PhaZ	pMiniT derivative, a kanamycin resistance cassette flanked by regions (~500-bp) upstream and downstream of <i>phaZ</i>	This work
pMini- Δ PhaR	pMiniT derivative, a kanamycin resistance cassette flanked by regions (~500-bp) upstream and downstream of <i>phaR</i>	This work

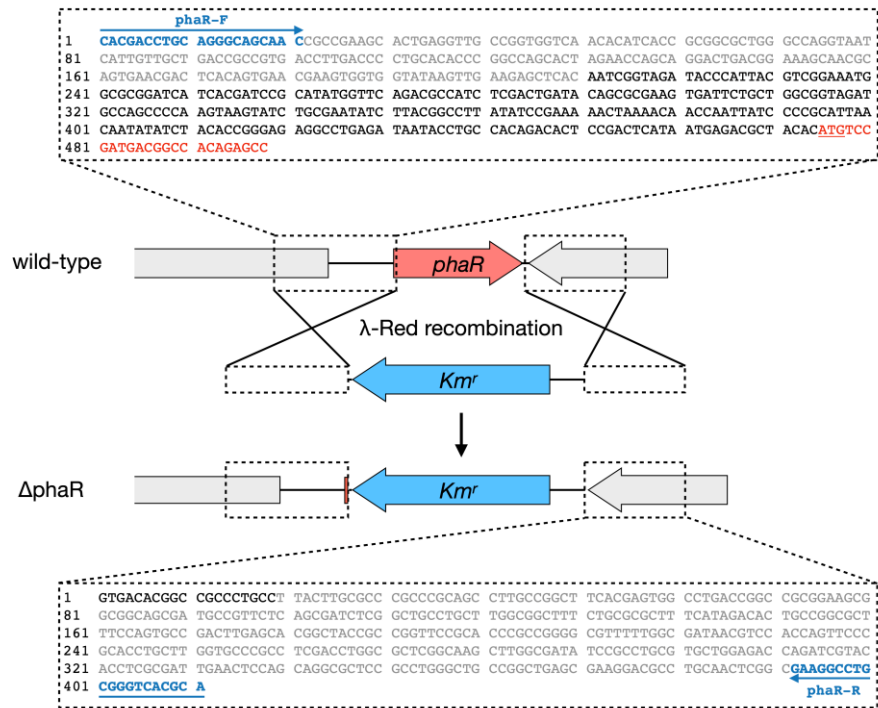
Table S3: Oligonucleotides used in this study.

Oligonucleotides	Sequence (5' → 3')	Description
phaR-F	CACGACCTGCAGGGCAGCAAC	amplification of the linearized DNA fragment for Δ phaR
phaR-R	TGCGTGACCCGCAGGCCTTC	
phaZ-F	ACGCCATGGGACTCCTGCTAC	amplification of the linearized DNA fragment for Δ phaZ
phaZ-R	GAGGTGCCAGGTCGGATCAGC	
pMini-F	ACCTGCCAACCAGCGAGAAC	sequencing primers for pMiniT plasmid derivatives
pMini-R	TCAGGGTTATTGTCTCATGAGCG	

Table S4 The gradient of elution solvents.

No	Time (min)	Solvent A	Solvent B
1	0.00	90.0	10.0
2	10.00	85.0	15.0
3	12.00	80.0	20.0
4	14.00	60.0	40.0
5	16.00	40.0	60.0
6	18.00	5.0	95.0
7	20.00	40.0	60.0

8	22.00	75.0	25.0
9	23.00	90.0	10.0



FigureS1. Schematic representation of the generation of Δ phaR knockout mutants.

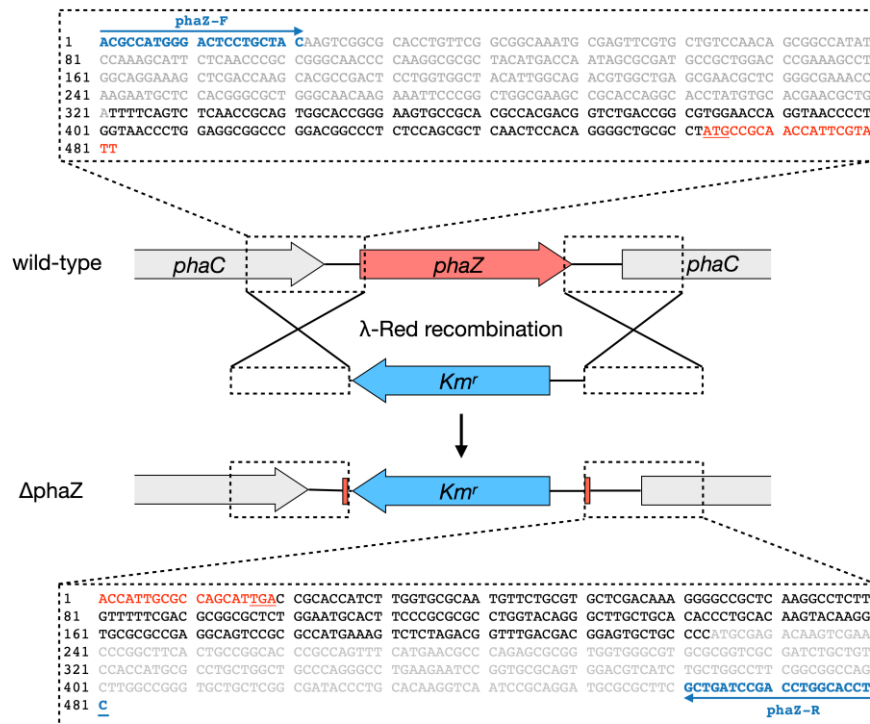


Figure S2. Schematic representation of the generation of Δ phaZ knockout mutants.

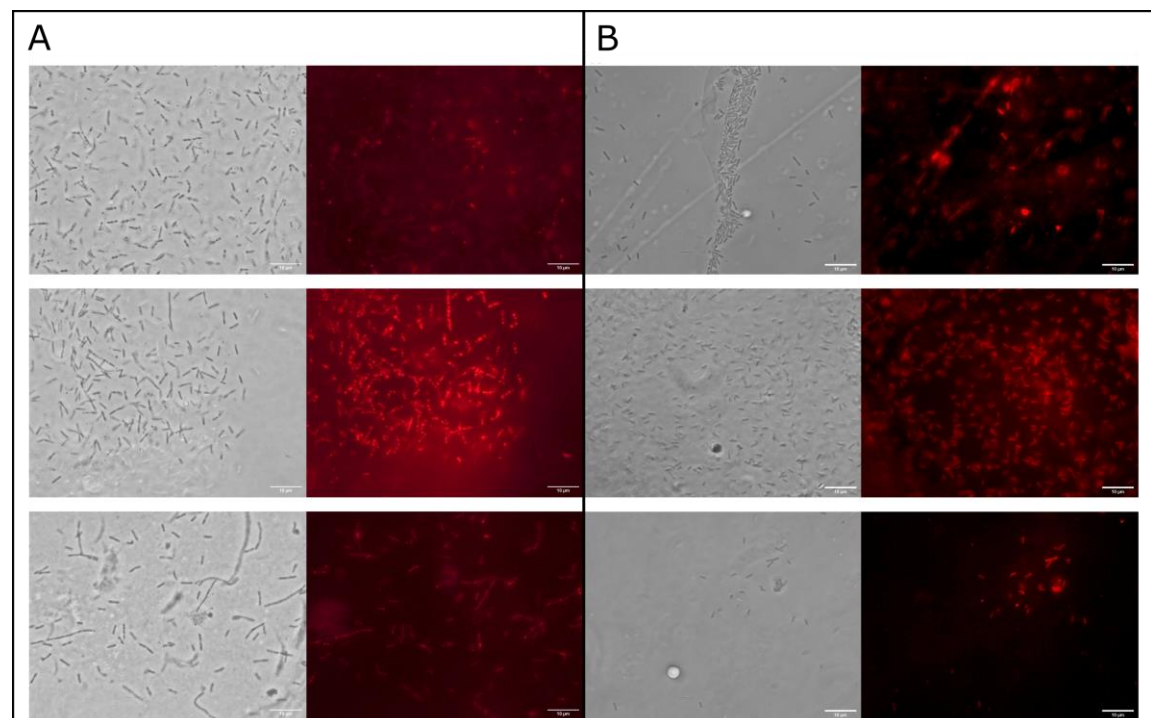
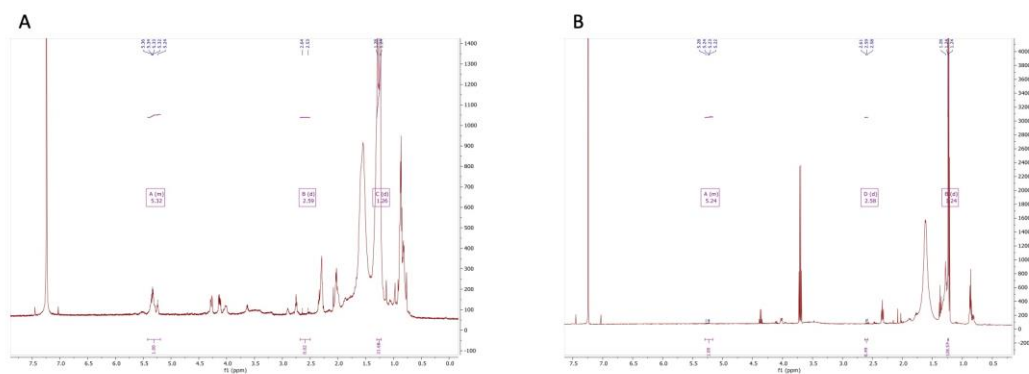


Figure S3. Accumulation of PHB in *Pseudomonas* sp. phDV1 strain and knockout mutants. Optical and fluorescence microscopy. (A) Upper-line *Pseudomonas* sp. phDV1 grown in GP extracts. Middle-line *Pseudomonas* sp. phDV1 Δ phaZ strain grown in GP extracts. Lower-line *Pseudomonas* sp. phDV1 Δ phaR strain grown in GP extracts. (B) Upper-line *Pseudomonas* sp. phDV1 grown in 4.5 mM phenol. Middle-line *Pseudomonas* sp. phDV1 Δ phaZ strain grown in 4.5 mM phenol. Lower-line *Pseudomonas* sp. phDV1 Δ phaR strain grown in 4.5 mM phenol.



FigureS4. ^1H NMR spectra of the isolated PHB granules from the *Pseudomonas* sp. pHDV1 ΔphaZ strain grown with 1% GP extracts (A) and 4.5 mM phenol (B).