**TABLE S1.** Primers used in the construction of plasmids and strains are described below. Primers 1-2 were used to insert a SwaI site into pGY46. Primers 3-6 were used to amplify *R. aetherivorans* I24 PHA synthase genes. Primers 7-8 were used to amplify *P. aeruginosa phaJ1*. Primers 9-10 were used to amplify the PHA operon from Re2152 so that it could be cloned into pBBR1MCS-2. Primers 11-16 were used to delete *proC* from the *R. eutropha* genome. Primers 17-18 were used to amplify the *proC* region of the *R. eutropha* genome so that it could be cloned into pCB81.

Primer	Name	Sequence (5' to 3')	Comment
1	pGY46 SwaI F	GGCAGAGACAATCAAATC <u>ATTTAAAT</u> GCTTGCATGAG	SwaI site underlined
2	pGY46 SwaI R	GATTTGATTGTCTCTCTGCCGTCACTATTC	
3	phaC1 Ra F	<u>ATTTAAAT</u> AGGAGATGTCCCATGCTCGACCA	SwaI site underlined
4	phaC1 Ra R	<u>ATTTAAAT</u> CAGCTGAAGACGTACGT	SwaI site underlined
5	phaC2 Ra F	<u>ATTTAAAT</u> AGGAGGAGGCGCATGATGGCCCA	SwaI site underlined
6	phaC2 Ra R	<u>ATTTAAAT</u> CAGCCGGCGGCAGGTCGCGCA	SwaI site underlined
7	phaJ1 Pa F	GGCGCCCAAGGAGATCTCCATGAGCCAGGTCCAGAACATTCC	AscI site underlined, RBS italicized
8	phaJ1 Pa R	GG <u>TTAATTAA</u> GACGGTAGGGAAAGCCGCTCAGCCGATGCTGATCG	PacI site underlined
9	PHA operon F	GATATC <u>GGTACC</u> CATCCTTCTCGCCTATGCTC	KpnI site underlined
10	PHA operon R	GATATC <u>AAGCTT</u> CTGCCCTGATTCTATGCCCAAC	HindIII site underlined
11	proC upstream F	C <u>GGATCC</u> CTACGTCCAGGAAGGCGTCGAC	BamHI site underlined
12	proC upstream R	<u>GCCGATTTAAATGCCG</u> ATCGAGCATGGAGATCCGTTG	Overlap region with SwaI site underlined
13	proC downstream F	CGGCATTTAAATCGGCATTGAGGCGCGGCCAAAC	Overlap region with SwaI site underlined
14	proC downstream R	C <u>GGATCC</u> CCGTTCTTCAAGCGCTTCTTTGCG	BamHI site underlined
15	proC diag F	GGTCAATATCAGCGGCGAAG	
16	proC diag R	CGATCATGCTCTGCTATGCC	
17	proC region clone F	G <u>ACCGGT</u> GGACATCCTTGTGCGTCATC	AgeI site underlined
18	proC region clone R	G <u>ACCGGT</u> GGTATCATTACACGCTGATTCGTGAC	AgeI site underlined