Supporting information Table 7A List of strains and plasmids used in the anaerobic study

Strains/Plasmids	Description[a]	References/Source
Strains		
P. putida KT2440	American Type Culture Collection 47054	ATCC[b]
E. coli TOP10	F_*mcrA_(mrr-hsdRMS-mcrBC) (_80lacZ_M15 _lacx74 deoR recA1 araD139 _(ara-leu)7697galUgalKrpsLendA1 nupG*	Invitrogen[c]
AC01P	KT2440 P*ackA* :P*tacackA* $_{Pae}$	This study
AC01E	KT2440 P*ackA* :P*tacackA* $_{Eco}$	This study
Plasmids		
pBBR1-MCS2	Km^R, 5.1-kb, Broad host vector	Mather, et al. 1995
pTAC15K	Km^R, 3.9-kb, p15A ori	Lab stock
pTAC15K-PaeackA	*ackA* $_{Pae}$ cloned in *EcoRI* and *PstI* site of pTAC15K	This study
pTAC15K-EcoackA	*ackA* $_{Eco}$ cloned in *EcoRI* and *PstI* site of pTAC15K	This study
pBMCS2***tac*** PaeackA	Km^R, P*ackA* :P*tac ackA* $_{Pae}$ cloned in *BamHI* and *XhoI* site of pBBR1-MCS2, 7.7-kb	This study
pBMCS2***tac*** EcoackA	Km^R, P*ackA* :P*tac ackA* $_{Eco}$ cloned in *BamHI* and *XhoI* site of pBBR1-MCS2, 7.7-kb	This study

[a]Abbreviatesion: Km, kanamycin; R, resistance

[b]American Type Culture Collection

[c]Invitrogen, Corp., Carlsbad, CA

Supporting information Table 7B List of oligonucleotides used in the anaerobic study

Name	Sequence (5' -> 3')[a]
PAO1ackA_F	GCATGAATTCATGCCCTCACGCAACATACTGG
PAO1ackA_R	GGATCTGCAGTCAGTCGAGCAGGGCCAGC
EcoackA_F	GGCAGAATTCATGTCGAGTAAGTTAGTACTGG
EcoackA_R	AATTCAATCTGCAGTCAGGCAGTCAGGCGGCTC

[a]Restriction sites are underlined

Supporting information: Methods

For the construction of the pTAC15K-PaeackA, the *ackA* gene was amplified by PCR using the genomic DNA of *P. aeruginosa* PAO1 as a template and the oligonucleotide primers PAO1ackA_F (5' GCATGAATTCATGCCCTCACGCAACATACTGG 3') and PAO1ackA_R (5' GGATCTGCAGTCAGTCGAGCAGGGCCAGC 3'). The PCR product was digested with *EcoRI* and *PstI* and ligated with *EcoRI-PstI*-digested DNA fragment of pTAC15K vector. The resulting plasmid, pTAC15K-PaeackA, was then digested with *BamHI* and *XhoI* resulting in a 2.6-kb fragment with the *tac* promoter attached to *ackA*. This fragment was then ligated with *BamHI-XhoI*-digested DNA fragment of the broad host vector pBBR1-MCS2, resulting in the plasmid pBMCS2*tac*PaeackA, which expresses the *ackA* gene under the control of the *tac* promoter.

For the construction of the pTAC15K-EcoackA plasmid, the *ackA* gene was amplified by PCR using the genomic DNA of *E. coli* W3110 as a template and the oligonucleotide primers EcoackA_F (5' GGCAGAATTCATGTCGAGTAAGTTAGTACTGG 3') and EcoackA_R (5' AATTCAATCTGCAGTCAGGCAGTCAGGCGGCTC 3'). The PCR product was digested with *EcoRI* and *PstI* and ligated with *EcoRI-PstI*-digested DNA fragment of pTAC15K vector. The resulting plasmid, pTAC15K-EcoackA, was then digested with *BamHI* and *XhoI* resulting in a 2.6-kb fragment with the *tac* promoter attached to *ackA*. This fragment was then ligated with *BamHI-XhoI*-digested DNA fragment of the broad host vector pBBR1-MCS2, resulting in the plasmid pBMCS2*tac*EcoackA which expresses the *ackA* gene under the control of the *tac* promoter.