

TABLE S1. Bacterial strains and plasmids used in this study.

Strain/ Plasmid	Properties	Reference
Strains		
<i>E. coli</i> DH5 α	Cloning strain, <i>recA1</i> , Δ <i>lacZ</i>	Gibco BRL now Invitrogen
<i>E. coli</i> BL21 (DE3)	Expression strain	[1]
<i>P. aeruginosa</i> PAO1	Parent strain	[2]
<i>C. violaceum</i> (DSM Nr. 30191)	Parent strain	DSMZ, Braunschweig
<i>A. tumefaciens</i> NTL4 (pCF218)(pCF372)	Reporter strain for autoinducer molecules, <i>tral::lacZ</i> , km ^R , carrying pCF218 & pCF372	[3-5]
<i>A. tumefaciens</i> KYC6	AHL overproducing transposon mutant	[3]
Plasmids		
pBio5-pBKCMV	Metagenome-derived clone encoding <i>bpiB09</i> gene in pBK-CMV, km ^R	This work, GenBank# EF530730.1,
pBluescript SK+	Cloning vector, amp ^R	Fermentas/Thermo Scientific, St. Leon-Rot, Germany
pET-19a	N-terminal 10-his cloning vector, amp ^R	Novagen, Karlsruhe, Germany
pET-21a	C-terminal 6-his cloning vector, amp ^R	
pBBR1MCS-5	Broad host-range vector, km ^R	[6]
pBK-CMV	Phagemid vector; km ^R	Stratagene
pET19b:: <i>bpiB09_dimer</i>	Dimerization mutants G162Y and D109K	This work
pET19b:: <i>bpiB09_tetra</i>	Tetramerization mutant, G162Y and D109K and deletion of F227 to end	This work
pBBR1MCS-5:: <i>bpiB09</i>	pBBR1MCS-5 containing <i>bpiB09</i>	This work
pBBR1MCS-5:: <i>celA</i>	pBBR1MCS-5 containing 2 kb cellulase gene, experimental control	[7]
pBBR1MCS-5:: <i>ACP_0942</i>	pBBR1MCS-5 containing <i>A. capsulatum</i> possible SDR gene ACP_0942	This work

1. Studier FW, Moffatt BA (1986) Use of bacteriophage T7 RNA polymerase to direct selective high-level expression of cloned genes. *J Mol Biol* 189: 113-130.
2. Holloway BW, Krishnapillai V, Morgan AF (1979) Chromosomal genetics of *Pseudomonas*. *Microbiol Rev* 43: 73-102.
3. Fuqua WC, Winans SC (1994) A LuxR-LuxI type regulatory system activates *Agrobacterium* Ti plasmid conjugal transfer in the presence of a plant tumor metabolite. *J Bacteriol* 176: 2796-2806.
4. Fuqua C, Winans SC (1996) Conserved cis-acting promoter elements are required for density-dependent transcription of *Agrobacterium tumefaciens* conjugal transfer genes. *J Bacteriol* 178: 435-440.
5. Luo ZQ, Clemente TE, Farrand SK (2001) Construction of a derivative of *Agrobacterium tumefaciens* C58 that does not mutate to tetracycline resistance. *Mol Plant Microbe Interact* 14: 98-103.
6. Kovach ME, Elzer PH, Hill DS, Robertson GT, Farris MA, et al. (1995) Four new derivatives of the broad-host-range cloning vector pBBR1MCS, carrying different antibiotic-resistance cassettes. *Gene* 166: 175-176.
7. Schipper C, Hornung C, Bijtenhoorn P, Quitschau M, Grond S, et al. (2009) Metagenome-derived clones encoding two novel lactonase family proteins involved in biofilm inhibition in *Pseudomonas aeruginosa*. *Appl Environ Microbiol* 75: 224-233.