## Supplemented figure S1



**Fig. S1.** Prc and ProP are likely not involved in cellulose production in *Erwinia amylovora*. Cellulose production was determined in wild-type Ea1189 harboring the empty vector pBBR1-MCS5, Ea1189 $\Delta proQ$  harboring pBBR1-MCS5, Ea1189 $\Delta proQ$  harboring pBBR1-MCS5, Ea1189 $\Delta proQ$  harboring pBBR1-MCS5, Ea1189 $\Delta proQ$ . Three independent experiments with three replicates were performed. One representative experiment was chosen. Error bars indicate standard errors of the means. ns (not significant), P > 0.05 by Student's t-test.

## Supplemented figure S2



**Fig. S2.** ProQ represses intracellular c-di-GMP levels in *Erwinia amylovora*. Intracellular levels of c-di-GMP were measured in wild-type Ea1189 harboring the empty vector pCL1920, Ea1189 $\Delta$ proQ harboring pCL1920, Ea1189 $\Delta$ proQ harboring pCL1920-proQ, and Ea1189 $\Delta$ prc. One representative experiment was chosen, and two independent experiments with three replicates were performed. Error bars indicate standard errors of the means. Different lowercase letters above the bars indicate statistically significant differences between treatments (Fisher's least significant difference, *P* < 0.05).

## Supplemented Table S1

transposon	insertion sites	gene name	gene encoding protein function
mutant	relative to	( <b>ID</b> )	
names	gene 5' to 3'		
pQ2-4	1285 bp	bcsA	cellulose synthase catalytic subunit [UDP-forming]
	171 1	(EAM_3387)	11-1
pQ17-2	1/1 bp	bcsA	cellulose synthase catalytic subunit [UDP-forming]
pQ20-2	1850 bp	bcsA	cellulose synthase catalytic subunit [UDP-forming]
pQ32-1	1254 bp	bcsA	cellulose synthase catalytic subunit [UDP-forming]
pQ64-2	119 bp	bcsA	cellulose synthase catalytic subunit [UDP-forming]
pQ66-2	2100 bp	bcsA	cellulose synthase catalytic subunit [UDP-forming]
pQ69-2	1771 bp	bcsA	cellulose synthase catalytic subunit [UDP-forming]
pQ71-2	797 bp	bcsA	cellulose synthase catalytic subunit [UDP-forming]
pQ6-3	1016 bp	bcsB	putative cellulose synthase protein
		(EAM_3386)	
pQ11-2	808 bp	bcsB	putative cellulose synthase protein
pQ12-2	495 bp	bcsB	putative cellulose synthase protein
pQ15-2	1047 bp	bcsB	putative cellulose synthase protein
pQ18-1	2019 bp	bcsB	putative cellulose synthase protein
pQ29-2	1858 bp	bcsB	putative cellulose synthase protein
pQ30-1	1978 bp	bcsB	putative cellulose synthase protein
pQ13-1	2589 bp	bcsC	putative cellulose synthase protein
		(EAM_3385)	
pQ21-1	2004 bp	bcsC	putative cellulose synthase protein
pQ24-1	3569 bp	bcsC	putative cellulose synthase protein
pQ26-1	3992 bp	bcsC	putative cellulose synthase protein
pQ54-1	40 bp	<i>bcsE</i>	conserved hypothetical protein
		(EAM_3382)	
pQ48-2	333 bp	bcsQ	putative cellulose biosynthesis protein
0.40.2	400.1	(EAM_3388)	
pQ49-2	400 bp	bcsQ	putative cellulose biosynthesis protein
pQ47-2	103 bp	clpXI	ATP-dependent Clp protease ATP-binding subunit
m055.2	109 hr	(EAM_0991)	ATD dependent Cla protoco ATD hinding subunit
pQ33-2	108 bp	Сірхі	ATP-dependent CIP protease ATP-binding subunit
pQ7-2	153 bp	CSTA	carbon storage regulator
pa14-2	573 hn	$(EAW_2057)$	nutative signal transduction protein
Pq14-2	575 Op	(EAM 0564)	putative signal transduction protein
pQ19-1	52 bp	edcB	putative signal transduction protein
pQ22-1	374 bp	edcB	putative signal transduction protein
pO43-1	439 bp	edcB	putative signal transduction protein
r < '5 1	P	CACE	Permit e storen announder protoni

 Table S1. Detailed information for transposon mutants.

pQ53-1	1097 bp	fliC	flagellin
pQ65-2	255 bp	$\frac{(\text{EAM}_2302)}{gmhA}$	phosphoheptose isomerase (D-sedoheptulose 7-
020.0	11701	(EAM_0891)	phosphate isomerase)
pQ39-2	11/8 bp	hldE	bifunctional protein [includes: D-beta-D-heptose /-
		(EAM_2994)	phosphate kinase; D-beta-D-heptose 1-phosphate
			adenosyltransferase]
pQ40-1	272 bp	hldE	bifunctional protein [includes: D-beta-D-heptose 7- phosphate kinase; D-beta-D-heptose 1-phosphate adenosyltransferase]
nO58-2	502 hn	isn7	nutative intracellular sentation protein
pQ38-2	502 bp	(EAM_1886)	putative intracential septation protein
pQ4-2	1592 bp	lon	ATP-dependent protease La
		(EAM_0994)	
pQ5-1	230 bp	lon	ATP-dependent protease La
pQ8-2	2324 bp	lon	ATP-dependent protease La
pQ9-2	1192 bp	lon	ATP-dependent protease La
pQ45-1	1 bp	lrhA	NADH dehydrogenase operon transcriptional
	-	(EAM_2993)	regulator (LysR-family transcriptional regulator)
pQ51-1	2508 bp	mdoH	glucans biosynthesis glucosyl transferase H
		(EAM_1418)	
pQ70-2	1 bp	mdtA	multidrug resistance protein
1 -	1	(EAM_2183)	C I
pQ68-2	169 bp	murQ	putative phophosugar-binding protein
		(EAM_2506)	
pQ27-1	224 bp	nth	endonuclease III
		(EAM_1688)	
pQ42-2	42 bp	rfaC	lipopolysaccharide heptosyltransferase-1
	-	(EAM_0088)	
pQ62-2	487 bp	rfaC	lipopolysaccharide heptosyltransferase-1
pQ1	141 bp	waaE	lipopolysaccharide core biosynthesis glycosyl
	<b>^</b>	(EAM_0077)	transferase
pQ36-1	300 bp	waaE	lipopolysaccharide core biosynthesis glycosyl
			transferase
pQ57-2	536 bp	walW	glycosyl transferase
· -	Î Î	(EAM_0080)	
pQ63-2	923 bp	wbnF	putative uridine diphosphate galacturonate 4-
		(EAM_1916)	epimerase (nucleotide sugar epimerase)
pQ50-2	496 bp	wzyE	putative ECA polymerase
		(EAM 0174)	