

**S2\_Table. Plasmids used in this study.**

Plasmid	Relevant features	Source
Plasmids provided by others		
pABB812	HindIII-SalI fragment carrying <i>parS2/3</i> sequence (orientation II) inserted into pGB2	[1] <sup>a</sup>
pABB822	HindIII-SalI fragment carrying <i>parS1/4</i> sequence (orientation II) inserted into pGB2	[1] <sup>a</sup>
pABB832	HindIII-SalI fragment carrying <i>parS7</i> sequence (orientation II) inserted into pGB2	[1] <sup>a</sup>
pAKE600	<i>ori<sub>MB1</sub> ori<sub>TRK2</sub>; Ap<sup>R</sup> sacB</i>	[2] <sup>a</sup>
pET28mod	<i>ori<sub>MB1</sub> Km<sup>R</sup>, T7p, lacO, His tag, no BamHI site</i>	[3] <sup>a</sup>
pGB2	<i>ori<sub>SC101</sub>; Sp<sup>R</sup>/Sm<sup>R</sup></i>	[4] <sup>a</sup>
pGBT30	<i>ori<sub>MB1</sub> Ap<sup>R</sup>, lacI<sup>f</sup>, tacp</i> expression vector	[5] <sup>a</sup>
pKLB2	<i>ori<sub>MB1</sub>, Ap<sup>R</sup>, lacI<sup>f</sup>, tacp-parB<sub>P.a.</sub></i>	[1] <sup>a</sup>
pKLB28	pET28mod T7p- <i>parB<sub>P.a.</sub></i>	[1] <sup>a</sup>
Plasmids constructed		
pAKE600 derivatives		
pPJB1	<i>parS1</i> , 500 nt EcoRI-SalI fragment amplified with #57 and #58 primers on the PAO1161 genomic DNA as a template	This study
pPJB2	<i>parS2</i> , 500 nt EcoRI-SalI fragment amplified with #59 and #60 primers on the PAO1161 genomic DNA as a template	This study
pPJB3	<i>parS3</i> , 500 nt EcoRI-SalI fragment amplified with #61 and #62 primers on the PAO1161 genomic DNA as a template	This study
pPJB4.1	250 nt fragment upstream from <i>parS4</i> , inserted as EcoRI-NcoI after PCR amplification with #63 and #64 primers on the PAO1161 genomic DNA as a template	This study
pPJB4.2	250 nt fragment downstream from <i>parS4</i> , inserted as NcoI-XhoI after PCR amplification with #65 and #66 primers on the PAO1161 genomic DNA as a template	This study
pPJB5	<i>parS5</i> , 500nt XbaI-SmaI fragment amplified with #67 and #68 primers on the PAO1161 genomic DNA as a template	This study
pPJB6	<i>parS6</i> , 500nt EcoRI-SalI fragment amplified with #69 and #70 primers on the PAO1161 genomic DNA as a template	This study
pPJB7	<i>parS7</i> , 500nt EcoRI-NcoI fragment amplified with #71 and #72 primers on the PAO1161 genomic DNA as a template	This study
pPJB8	<i>parS8</i> , 500nt EcoRI-NcoI fragment amplified with #73 and #74 primers on the PAO1161 genomic DNA as a template	This study
pPJB9	<i>parS9</i> , 500nt EcoRI-SalI fragment amplified with #75 and #76 primers on the PAO1161 genomic DNA as a template	This study
pPJB10	<i>parS10</i> , 500nt EcoRI-NcoI fragment amplified with #77 and #78 primers on the PAO1161 genomic DNA as a template	This study
pPJB11	<i>parS1</i> * <sup>b</sup> , PCR site-directed mutagenesis of pPJB1 with #79 and #80 primers	This study
pPJB12	<i>parS2</i> * <sup>b</sup> , PCR site-directed mutagenesis of pPJB2 with #81 and #82 primers	This study
pPJB13	<i>parS3</i> * <sup>b</sup> , PCR site-directed mutagenesis of pPJB3 with #83 and #84 primers	This study
pPJB14	$\Delta$ <i>parS4</i> , NcoI-XhoI fragment of pJB4.2 inserted into pJB4.1	This study

pPJB15	<i>parS5</i> *, PCR site-directed mutagenesis of pPJB5 with #85 and #86 primers	This study
pPJB16	<i>parS6</i> *, PCR site-directed mutagenesis of pPJB6 with #87 and #88 primers	This study
pPJB17	<i>parS7</i> *, PCR site-directed mutagenesis of pPJB7 with #89 and #90 primers	This study
pPJB18	<i>parS8</i> *, PCR site-directed mutagenesis of pPJB8 with #91 and #92 primers	This study
pPJB19	<i>parS9</i> *, PCR site-directed mutagenesis of pPJB9 with #93 and #94 primers	This study
pPJB20	<i>parS10</i> *, PCR site-directed mutagenesis of pPJB10 with #95 and #96 primers	This study
pPJB21	<i>parS7</i> modified into <i>parS2</i> , PCR site-directed mutagenesis of pPJB7 with #97 and #98 primers	This study
pPJB22	<i>parS4</i> , 500 nt EcoRI-XhoI fragment amplified with #63 and #66 primers on the PAO1161 genomic DNA as a template and inserted between EcoRI and SalI sites	This study
pGB2 derivatives		
pPJB22	<i>parS5</i> , annealed oligonucleotides #41 and #6 inserted between EcoRI-SalI sites	This study
pPJB23	<i>parS6</i> , annealed #42 and #8 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB24	<i>parS8</i> , annealed #45 and #12 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB25	<i>parS9</i> , annealed #46 and #14 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB26	<i>parS10</i> , annealed #47 and #16 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB27	<i>parS1</i> *, annealed #48 and #18 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB28	<i>parS2</i> *, annealed #49 and #20 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB29	<i>parS3</i> *, annealed #50 and #22 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB30	<i>parS5</i> *, annealed #51 and #24 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB31	<i>parS6</i> *, annealed #52 and #26 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB32	<i>parS7</i> *, annealed #53 and #28 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB33	<i>parS8</i> *, annealed #54 and #30 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB34	<i>parS9</i> *, annealed #55 and #32 oligonucleotides inserted between EcoRI-SalI sites	This study
pPJB35	<i>parS10</i> *, annealed #56 and #34 oligonucleotides inserted between EcoRI-SalI sites	This study

<sup>a</sup>References

1. Bartosik AA, Lasocki K, Mierzejewska J, Thomas CM, Jagura-Burdzy G. ParB of *Pseudomonas aeruginosa*: interactions with its partner ParA and its target *parS* and specific effects on bacterial growth. *J Bacteriol.* 2004;186: 6983–6998. doi:10.1128/JB.186.20.6983-6998.2004
2. El-Sayed AK, Hothersall J, Thomas CM. Quorum-sensing-dependent regulation of biosynthesis of the polyketide antibiotic mupirocin in *Pseudomonas fluorescens* NCIMB 10586. *Microbiology.* 2001;147: 2127–2139.
3. Lukaszewicz M, Kostelidou K, Bartosik AA, Cooke GD, Thomas CM, Jagura-Burdzy G. Functional dissection of the ParB homologue (KorB) from IncP-1 plasmid RK2. *Nucleic Acids Res.* 2002;30: 1046–1055. doi:10.1093/nar/30.4.1046
4. Churchward G, Belin D, Nagamine Y. A pSC101-derived plasmid which shows no sequence homology to other commonly used cloning vectors. *Gene.* 1984;31: 165 – 171. doi:http://dx.doi.org/10.1016/0378-1119(84)90207-5
5. Jagura-Burdzy G, Ibbotson JP, Thomas CM. The *korF* region of broad-host-range plasmid RK2 encodes two polypeptides with transcriptional repressor activity. *J Bacteriol.* 1991;173: 826–833.

<sup>b</sup>- \* corresponds to the mutated version of *parS* sequence as indicated in Table 1