**Supplementary File 1. Strains and plasmids used on this study.**

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| --- | --- | --- | --- |
| **Strains or plasmids** | **Genotype / description** | **Strain number** | **Source and/or reference** |
| ***Acinetobacter baumannii***  |
| A118 | Wild type; AmpR, CmR; ATCC BAA-2093 | MB#5144 | ATCC (ATCC BAA-2093) (Ramirez *et al*, 2010) (Traglia *et al*, 2014) |
| A118Δ*itrA* | A118 with *itrA* deleted using suicide plasmid pGP704-Sac-Kan-Δ*itrA* | MB#11161 | This study |
| A118Δ*hcp* | A118 with *hcp* deleted using suicide plasmid pGP704-Sac-Kan-Δ*hcp* | MB#11160 | This study |
| A118Δ*hcp*Δ*itrA* | A118Δ*hcp* with *itrA* deleted using suicide plasmid pGP704-Sac-Kan-Δ*itrA* | MB#11162 | This study |
| A118Δ*hcp*-TnAraC | A118Δ*hcp* containing mini-Tn7-*araC* (TnAraC); CmR, GentR | MB#11165 | This study |
| A118Δ*hcp*Δ*itrA-*TnAraC  | A118Δ*hcp*Δ*itrA* containing mini-Tn7-*araC* (TnAraC); CmR, GentR | MB#11164 | This study |
| A118Δ*hcp*Δ*itrA*-Tn*itrA* | A118Δ*hcp*Δ*itrA* containing mini-Tn7-*araC*-*itrA* (Tn*itrA*); CmR, GentR | MB#11163 | This study |
| A118-*tssB-msfgfp* | A118 carrying translational fusion encoding *tssB-msfgfp* at native *tssB* locus; constructed using suicide plasmid pGP704-Sac-Kan-*tssB-msfgfp*  | MB#11201 | This study (fusion derived from Lin *et al.*, 2022) |
| A118Δ*itrA*-*tssB*-*msfgfp* | A118 carrying translational fusion encoding *tssB-msfgfp* at native *tssB* locus with *itrA* deleted using suicide plasmid pGP704-Sac-Kan-Δ*itrA* | MB#11200 | This study |
| A118Δ*tssB*::FRT-kan-FRT2 | A118 with *tssB* deleted by natural transformation with PCR fragment replacing *tssB* by FRT-*aph*-FRT2 cassette; KanR | MB#11199 | This study |
| A118Δ*tssB*::FRT | A118Δ*tssB*::FRT-kan-FRT2 after flip and cure  | MB#11198 | This study |
| A118Δ*bfmS* | A118 with *bfmS* deleted using suicide plasmid pGP704-Sac-Kan-Δ*bfmS* | MB#11197 | This study |
| A118Δ*bfmS*Δ*itrA* | A118Δ*bfmS* with *itrA* deleted using suicide plasmid pGP704-Sac-Kan-Δ*itrA* | MB#11196 | This study |
| A118-*wzc*[K547Q] | A118 carrying a substitution in the Wzcwalker A box [K547Q] made using suicide plasmid pGP704-Sac-Kan-*wzc*[K547Q] | MB#11195 | This study |
| A118-*glmS*-*P*[*bfmS*] | A118 transformed by natural transformation with PCR fragment inserted between *glmS* and *murI,* containing upstream intergenic region (77 bp) of *bfmS* followed by *aac(3)IV* cassette; AprR | MB#11194 | This study |
| A118Δ*hcp*-*glmS*-*P*[*bfmS*] | A118Δ*hcp* transformed by natural transformation with PCR fragment inserted between *glmS* and *murI*, containing upstream intergenic region (77 bp) of *bfmS* followed by *aac(3)IV* cassette; AprR | MB#11193 | This study |
| A118Δ*bfmS*-*glmS*-*P*[*bfmS*] | A118Δ*bfmS* transformed by natural transformation with PCR fragment inserted between *glmS* and *murI*, containing upstream intergenic region (77 bp) of *bfmS* followed by *aac(3)IV* cassette; AprR | MB#11192 | This study |
| A118Δ*bfmS*-*glmS*-*P*[*bfmS*]-*bfmS* | A118Δ*bfmS* transformed by natural transformation with PCR fragment inserted between *glmS* and *murI*, containing upstream intergenic region (77 bp) of *bfmS* and *bfmS* followed by *aac(3)IV* cassette; AprR | MB#11191 | This study |
| A118Δ*tslA-tssB*-*msfgfp* | A118 with *tslA* deleted carrying a translational fusion encoding *tssB-msfgfp* at native *tssB* locus using suicide plasmid pGP704-Sac-Kan-*tssB-msfgfp* | MB#11476 | This study |
| A118Δ*bfmS-tssB-msfgfp* | A118 with *bfmS* deleted carrying translational fusion encoding *tssB-msfgfp* at native *tssB* locus using suicide plasmid pGP704-Sac-Kan-*tssB-msfgfp* | MB#11188 | This study |
| A118Δ*bfmSΔitrA-tssB-msfgfp* | A118Δ*bfmS* carrying a translational fusion encoding *tssB-msfgfp* at native *tssB* locus with *itrA* deleted using suicide plasmid pGP704-Sac-Kan-Δ*itrA* | MB#11187 | This study |
| A118Δ*tslA*  | A118 with deleted *tslA* using suicide plasmid pGP704-Sac-Kan-Δ*tslA* (plasmid from (Lin *et al*, 2022), as listed below) | MB#11186 | This study  |
| A118 / pMMB67EH | A118 carrying plasmid pMMB67EH; AmpR  | MB#11174 | This study  |
| A118Δ*hcp* / pMMB67EH | A118Δ*hcp* carrying plasmid pMMB67EH ; AmpR | MB#11172 | This study  |
| A118 / pMMB67EH-*hcp* | A118 carrying plasmid pMMB67EH-*hcp*; AmpR | MB#11173 | This study  |
| A118Δ*hcp* / pMMB67EH-*hcp* | A118Δ*hcp* carrying plasmid pMMB67EH-*hcp*; AmpR  | MB#11171 | This study  |
| A118Δ*clpXP*::FRT-kan-FRT2 | A118 with *clpX* and *clpP* deleted by natural transformation with PCR fragment containing *clpX* and *clpP* replaced by FRT-*aph*-FRT2 cassette; KanR | MB#11170 | This study  |
| A118Δ*lon*::FRT-kan-FRT2 | A118 deleted for *lon* by natural transformation with PCR fragment containing *lon* replaced by FRT-*aph*-FRT2 cassette; KanR | MB#11179 | This study  |
| A118Δ*tssB*::FRTΔ*clpXP*::FRT-kan-FRT2 | A118Δ*tssB*::FRT deleted for *clpX* and *clpP* genes by natural transformation with PCR fragment containing *clpX* and *clpP* replaced by FRT-*aph*-FRT2 cassette; KanR | MB#11169 | This study  |
| A118Δ*tssB*::FRTΔ*lon*::FRT-kan-FRT2 | A118Δ*tssB*::FRT deleted for *lon* by natural transformation with PCR fragment containing *lon* replaced by FRT-*aph*-FRT2 cassette; KanR | MB#11178 | This study  |
| A118Δ*hcp* / pMMB67EH-*hcp*CTDΔ11 | A118Δ*hcp* carrying plasmid pMMB67EH-*hcp* CTDΔ11; AmpR | MB#12025 | This study  |
| A118Δ*hcp* / pMMB67EH-*hcp*[A166D/A167D] | A118Δ*hcp* carrying plasmid pMMB67EH-*hcp*[A166D/A167D]; AmpR | MB#12026 | This study  |
| A118Δ*bfmS*Δ*clpXP*::FRT-kan-FRT2 | A118Δ*bfmS* deleted for *clpX* and *clpP* by natural transformation with PCR fragment containing *clpXP* replaced by FRT-*aph*-FRT2 cassette; KanR | MB#12019 | This study  |
| A118Δ*pglL* | A118 with *pglL* deleted using suicide plasmid pGP704-Sac-Kan-Δ*pglL* | MB#12021 | This study  |
| 29D2 | Wild type; AmpR | MB#8581 | (Wilharm *et al*, 2017) |
| 29D2Δ*tssB::*FRT-kan-FRT2 | 29D2 deleted for *tssB* by natural transformation with PCR fragment containing *tssB* replaced by FRT-*aph*-FRT2 cassette; KanR | MB#11177 | This study  |
| 29D2Δ*bfmS* | 29D2 with *bfmS* deleted using suicide plasmid pGP704-Sac-Kan-Δ*bfmS* | MB#11168 | This study  |
| 86II/2C | Wild type; AmpR | MB#8581 | (Wilharm *et al.*, 2017) |
| 86II/2Δ*tssB::*FRT-kan-FRT | 86II/2C deleted for *tssB* by natural transformation with PCR fragment containing *tssB* replaced by FRT-*aph*-FRT; KanR | MB#11176 | This study  |
| 86II/2CΔ*bfmS* | 86II/2C with *bfmS* deleted using suicide plasmid pGP704-Sac-Kan-Δ*bfmS* | MB#11167 | This study  |
| ***Enterobacter cloacae*** |
| ERR2221156 | *Enterobacter cloacae* commensal ERR2221156 from HBC collection | MB#8341 | (Forster *et al*, 2019) |
| ERR2221156Δ*tssB* | ERR2221156 deleted for *tssB*  | MB#9173 | (Flaugnatti *et al*, 2021) |
| ERR2221156 / pBAD(kan) | *Enterobacter cloacae* commensal ERR2221156 from HBC collection carrying plasmid pBAD(kan); KanR | MB#9179 | (Flaugnatti *et al*, 2021) |
| ERR2221156Δ*tssB* / pBAD(kan) | ERR2221156 deleted for *tssB* and carrying plasmid pBAD(kan); KanR | MB#9180 | (Flaugnatti *et al*, 2021) |
| ***Escherichia coli* strains** |
| S17-1λpir | TpR SmR *recA* *thi pro* *hsdR2M1* RP4:2-Tc:Mu:Kmr Tn7 (λ*pir*) | MB#648 | (Simon *et al*, 1983) |
| SM10λpir | *thi-1* *thr* *leu* *ton*A *lac*Y *sup*E *rec*A::RP4-2-Tc::Mu, KmR (λ*pir*) | MB#647 | Laboratory stock |
| TOP10 | F- *mcrA* Δ(*mrr-hsd*RMS-*mcr*BC) φ80*lacZ*ΔM15 Δ*lac*X74 *nup*G *rec*A1 *ara*Δ139 Δ(*ara-leu*)7697 *gal*E15 *gal*K16 *rpsL* (StrepR) *end*A1λ-. | MB#741 | Invitrogen |
| TOP10 / pMMB67EH | TOP10 containing pMMB67EH vector; AmpR | MB#11203 | This study  |
| TOP10 / pMMB67EH-*hcp* | TOP10 containing plasmid pMMB67EH-*hcp*; AmpR | MB#11175 | This study  |
| TOP10 / pMMB67EH-*hcp*CTDΔ11 | TOP10 containing a derivative plasmid of pMMB67EH-*hcp* encoding C-terminally truncated Hcp (lacking the last 11 amino acids); AmpR | MB#12027 | This study |
| TOP10 / pMMB67EH-*hcp*[A166D/A167D] | TOP10 containing a derivative plasmid of pMMB67EH-*hcp* encoding for Hcp[A166D/A167D] (last two amino acids changed from Ala to Asp); AmpR | MB#12028 | This study |
| K-12 | F+ lambda+ K-12 strain | MB#2903 | Laboratory stock |
| K-12 / pSG3685 | *E. coli* K-12 transformed by electroporation with plasmid pSG3685 to confer StrepR | MB#11202 | This study  |
| MC4100 | F- [*araD*139]B/r DE(*argF*-*lac*)169 Lambda- e14- *flh*D5301 DE(*fruK*-*yeiR*)725(*fruA25*) *relA1 rpsL150*(StrepR) rbsR22 DE(*fimB*-*fimE*)632(::IS1) deoC1 | MB#2905 | Laboratory stock  |
| MC4100-Tn-CmR | *E. coli* MC4100 containing mini-Tn7-araC-*cat* (Tn-CmR) confering resistance to chloramphenicol; CmR, StrepR | MB#5123 | This study  |
| **Plasmids** |
| pGP704-Sac28 | Suicide plasmid; oriR6K *sacB*; AmpR | MB#649 | (Meibom *et al*, 2004) |
| pGP704-Sac-Kan | Suicide plasmid, oriR6K *sacB*; KanR | MB#6038 | (Metzger *et al*, 2019) |
| pGP704-TnAraC | pGP704 with mini-Tn7 carrying *araC* and *PBAD*; AmpR, GentR | MB#5513 | (Adams *et al*, 2019) |
| pUX-BF13 | oriR6K, helper plasmid with Tn7 transposition function; AmpR | MB#457 | (Bao *et al*, 1991) |
| pBAD(kan) | *bla* replaced by *aph* in pBAD/Myc-HisA; promoter region and MCS maintained; KanR | MB#3363 | (Seitz *et al*, 2014) |
| pGP704-Sac-Kan-Δ*itrA* | pGP704-Sac-Kan carrying a deletion within *itrA*; KanR | MB#11185 | This study |
| pGP704-Sac-Kan-Δ*hcp* | pGP704-Sac-Kan carrying a deletion within *hcp*; KanR | MB#11184 | This study |
| pGP704-Sac-Kan-Δ*bfmS* | pGP704-Sac-Kan carrying a deletion within *bfmS*; KanR | MB#11183 | This study |
| pGP704-Sac-Kan-*tssB-msfgfp* | pGP704-Sac-Kan carrying a translational fusion encoding *tssB-msfgfp* to replace *tssB* at its native locus; the insert was amplified using genomic DNA of strain LLB832 from Lin *et al.*, 2022 as template; KanR | MB#11182 | This study (fusion derived from Lin *et al.*, 2022) |
| pGP704-Sac-Kan-*wzc*[K547Q] | pGP704-Sac-Kan encoding K547Q variant of Wzc; KanR | MB#11181 | This study |
| pGP704-Sac-Kan-Δ*tslA* | pGP704-Sac-Kan carrying a deletion within *tslA*; KanR | MB#11189 | (Lin *et al.*, 2022) |
| pGP704-Sac-Kan-Δ*pglL* | pGP704-Sac-Kan carrying a deletion within *pglL*; KanR | MB#12020 | This study |
| pGP704-Tn-ItrA | pGP704 with mini-Tn7 carrying *araC* and *PBAD*-driven *itrA*; AmpR, GentR | MB#11180 | This study |
| pGP704-Tn-CmR | pGP704 with mini-Tn7 carrying *cat* cassette; AmpR, GentR, CmR | MB#5054 | (Metzger *et al.*, 2019) |
| pAT03 | pMMB67EH with FLP recombinase gene; AmpR | MB#9372 | (Tucker *et al*, 2014) |
| pMMB67EH | pMMB67EH; AmpR | MB#9371 | Laboratory stock |
| pMMB67EH-*hcp* | pMMB67EH with *hcp* gene from *A. baumannii* A118; AmpR | MB#11175 | This study |
| pMMB67EH-*hcp*CTDΔ11 | pMMB67EH encoding C-terminally truncated Hcp (lacking the last 11 amino acids (SLSNNTASYAA); AmpR | MB#12027 | This study |
| pMMB67EH-*hcp*[A166D/A167D] | pMMB67EH encoding for Hcp[A166D/A167D] (last two amino acids changed from Ala to Asp); AmpR | MB#12028 | This study |

**References Supplementary File 1**

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