**Table S1. Bacterial strains and plasmids used in this study.**

|  |  |  |
| --- | --- | --- |
| **Strain/Plasmid** | **Characteristics** | **Source** |
| **Plasmids** |  |  |
| pEX18Gm | Suicide vector for gene replacement | [1] |
| pEX18Gm-*pilA* | Deletion construct for PA14 *pilA* | This work |
| pEX18Gm-*fimU* | Deletion construct for PA14 *fimU* | This work |
| pEX18Gm-*pilV* | Deletion construct for PA14 *pilV* | This work |
| pEX18Gm-*pilW* | Deletion construct for PA14 *pilW* | This work |
| pEX18Gm-*pilX* | Deletion construct for PA14 *pilX* | This work |
| pEX18Gm-*pilY1* | Deletion construct for PA14 *pilY1* | This work |
| pEX18Gm-*pilE* | Deletion construct for PA14 *pilE* | This work |
| pEX18Gm-*sadC* | Deletion construct for *sadC* | This work |
| pEX18Gm­-*fimS* | Deletion construct for *fimS* | This work |
| pEX18Gm-*algR* | Deletion construct for *algR* | This work |
| pEX18Gm-*algR*D54A | Mating construct for *algR* D54A substitution | This work |
| pEX18Gm-*algR*D54E | Mating construct for *algR* D54E substitution | This work |
| pEX18Gm-*algU* | Deletion construct for *algU* | This work |
| pEX18Gm-*pilD* | Deletion construct for *pilD* | This work |
| pBADGr | Arabinose-inducible complementation vector | [2] |
| pBADGr-*pilW* | Complementation construct for *pilW* | [3] |
| pBADGr-*pilX* | Complementation construct for *pilX* | This work |
| pBADGr-*pilY1* | Complementation construct for *pilY1* | This work |
| pBADGr-*sadC* | Complementation construct for *sadC* | This work |
| pBADGr-*algR* | Complementation construct for *algR* | This work |
| pBADGr-*algR*D54A | Complementation construct for *algR*D54A | This work |
| pMS402 | Transcriptional reporter vector carrying the promoterless *luxCDABE* genes | [4] |
| pMS402-P*fimU* | Transcriptional reporter for *fimU* promoter | This work |
| pMS402-P*cdrA* | Transcriptional reporter for *cdrA* promoter | This work |
| pKT25 | Vector encoding T25 fragment of *B. pertussis* CyaA | [5] |
| pKT25-*fimS* | Vector encoding *fimS* fused to T25 | This work |
| pUT18C | Vector encoding T18 fragment of *B. pertussis* CyaA | [6] |
| pUT18C-*fimS* | Vector encoding *fimS* fused to T18 | [7] |
| pUT18C-*algR* | Vector encoding *algR* fused to T18 | This work |
| pUT18C-*pilA* | Vector encoding *pilA* fused to T18 | This work |
| pUT18C-*fimU* | Vector encoding *fimU* fused to T18 | [8] |
| pUT18C-*pilV* | Vector encoding *pilV* fused to T18 | This work |
| pUT18C-*pilW* | Vector encoding *pilW* fused to T18 | This work |
| pUT18C-*pilX* | Vector encoding *pilX* fused to T18 | This work |
| pUT18C-*pilE* | Vector encoding *pilE* fused to T18 | [9] |
| ***E. coli* strains** |  |  |
| DH5α | *F-φ80lacZΔM15 Δ(lacZYA-argF)U169 recA1 endA1 hsdR17(rk−, mk+) phoA supE44 thi-1 gyrA96 relA1 λ−* | Invitrogen |
| SM10 | thi-1 thr leu tonA lacY supE recA::RP4-2-Tc::Mu (KmR) | Invitrogen |
| OP50 | Uracil auxotroph, C. elegans food source | [10] |
| BTH 101 | Bacterial two-hybrid reporter strain | Euromedex |
| ***P. aeruginosa* strains** |  |  |
| PAO1 | WT | [11] |
| PAO1 *pilA* | ISphoA/hah transposon insertion at position 163 | [11] |
| PAO1 *fimU* | ISlacZ/hah transposon insertion at position 237 | [11] |
| PAO1 *pilV* | ISphoA/hah transposon insertion at position 122 | [11] |
| PAO1 *pilW* | ISlacZ/hah transposon insertion at position 381 | [11] |
| PAO1 *pilX* | ISphoA/hah transposon insertion at position 182 | [11] |
| PAO1 *pilY1* | ISlacZ/hah transposon insertion at position 1407 | [11] |
| PAO1 *pilE* | ISphoA/hah transposon insertion at position 183 | [11] |
| PAO1 *sadC* | Deletion of *sadC* | This work |
| PAO1 *fimS* | Deletion of *fimS* | This work |
| PAO1 *algR* | Deletion of *algR* | This work |
| PAO1 *algR*D54A | PAO1 expressing the phospho-inactive form of *algR* | This work |
| PAO1 *algR*D54E | PAO1 expressing the phospho-mimetic form of *algR* | This work |
| PA14 | WT | [12] |
| PA14 + pBADGr | WT with pBADGr | This work |
| PA14 + pMS402-P*fimU* | WT with pMS402 containing *fimU* promoter | This work |
| PA14 + pMS402-P*fimU* + pBADGr | WT with pMS402 containing *fimU* promoter and pBADGr | This work |
| PA14 + pMS402-P*cdrA* | WT with pMS402 containing *cdrA* promoter | This work |
| PA14 + pMS402-P*cdrA* + pBADGr | WT with pMS402 containing *cdrA* promoter and pBADGr | This work |
| PA14 *pilA* | Deletion of *pilA* | This work |
| PA14 *pilA* + pMS402-P*fimU* | Deletion of *pilA* with pMS402 containing *fimU* promoter | This work |
| PA14 *pilA* + pMS402-P*cdrA* | Deletion of *pilA* with pMS402 containing *cdrA* promoter | This work |
| PA14 *fimU* | Deletion of *fimU* | This work |
| PA14 *fimU* + pMS402-P*fimU* | Deletion of *fimU* with pMS402 containing *fimU* promoter | This work |
| PA14 *fimU* + pMS402-P*cdrA* | Deletion of *fimU* with pMS402 containing *cdrA* promoter | This work |
| PA14 *pilV* | Deletion of *pilV* | This work |
| PA14 *pilV* + pMS402-P*fimU* | Deletion of *pilV* with pMS402 containing *fimU* promoter | This work |
| PA14 *pilV* + pMS402-P*fimU* + pBADGr | Deletion of *pilV* with pMS402 containing *fimU* promoter and pBADGr | This work |
| PA14 *pilV* + pMS402-P*fimU* + pBADGr-*pilV* | Deletion of *pilV* with pMS402 containing *fimU* promoter and complemented with *pilV* | This work |
| PA14 *pilV* + pMS402-P*cdrA* | Deletion of *pilV* with pMS402 containing *cdrA* promoter | This work |
| PA14 *pilW* | Deletion of *pilW* | This work |
| PA14 *pilW* + pBADGr | Deletion of *pilW* containing pBADGr | This work |
| PA14 *pilW* + pBADGr-*pilW* | Deletion of *pilW* complemented with *pilW* | This work |
| PA14 *pilW* + pMS402-P*fimU* | Deletion of *pilW* with pMS402 containing *fimU* promoter | This work |
| PA14 *pilW* + pMS402-P*fimU* + pBADGr | Deletion of *pilW* with pMS402 containing *fimU* promoter and pBADGr | This work |
| PA14 *pilW* + pMS402-P*fimU* + pBADGr-*pilW* | Deletion of *pilW* with pMS402 containing *fimU* promoter and complemented with *pilW* | This work |
| PA14 *pilW* + pMS402-P*fimU* + pBADGr-*pilY1* | Deletion of *pilW* with pMS402 containing *fimU* promoter and complemented with *pilY1* | This work |
| PA14 *pilW* + pMS402-P*cdrA* | Deletion of *pilW* with pMS402 containing *cdrA* promoter | This work |
| PA14 *pilX* | Deletion of *pilX* | This work |
| PA14 *pilX* + pBADGr | Deletion of *pilX* containing pBADGr | This work |
| PA14 *pilX* + pBADGr-*pilX* | Deletion of *pilX* complemented with *pilX* | This work |
| PA14 *pilX* + pMS402-P*fimU* | Deletion of *pilX* with pMS402 containing *fimU* promoter | This work |
| PA14 *pilX* + pMS402-P*fimU* + pBADGr | Deletion of *pilX* with pMS402 containing *fimU* promoter and pBADGr | This work |
| PA14 *pilX* + pMS402-P*fimU* + pBADGr-*pilX* | Deletion of *pilX* with pMS402 containing *fimU* promoter and complemented with *pilX* | This work |
| PA14 *pilX* + pMS402-P*fimU* + pBADGr-*pilY1* | Deletion of *pilX* with pMS402 containing *fimU* promoter and complemented with *pilY1* | This work |
| PA14 *pilX* + pMS402-P*cdrA* | Deletion of *pilX* with pMS402 containing *cdrA* promoter | This work |
| PA14 *pilY1* | Deletion of *pilY1* | This work |
| PA14 *pilY1* + pBADGr | Deletion of *pilY1* containing pBADGr | This work |
| PA14 *pilY1* + pBADGr-*pilY1* | Deletion of *pilY1* complemented with *pilY1* | This work |
| PA14 *pilY1* + pMS402-P*fimU* | Deletion of *pilY1* with pMS402 containing *fimU* promoter | This work |
| PA14 *pilY1* + pMS402-P*fimU* + pBADGr | Deletion of *pilY1* with pMS402 containing *fimU* promoter and pBADGr | This work |
| PA14 *pilY1* + pMS402-P*fimU* + pBADGr-*pilY1* | Deletion of *pilY1* with pMS402 containing *fimU* promoter and complemented with *pilY1* | This work |
| PA14 *pilY1* + pMS402-P*fimU* + pBADGr-*fimU* | Deletion of *pilY1* with pMS402 containing *fimU* promoter and complemented with *fimU* | This work |
| PA14 *pilY1* + pMS402-P*fimU* + pBADGr-*pilV* | Deletion of *pilY1* with pMS402 containing *fimU* promoter and complemented with *pilV* | This work |
| PA14 *pilY1* + pMS402-P*fimU* + pBADGr-*pilW* | Deletion of *pilY1* with pMS402 containing *fimU* promoter and complemented with *pilW* | This work |
| PA14 *pilY1* + pMS402-P*fimU* + pBADGr-*pilX* | Deletion of *pilY1* with pMS402 containing *fimU* promoter and complemented with *pilX* | This work |
| PA14 *pilY1* + pMS402-P*fimU* + pBADGr-*pilE* | Deletion of *pilY1* with pMS402 containing *fimU* promoter and complemented with *pilE* | This work |
| PA14 *pilY1* + pMS402-P*cdrA* | Deletion of *pilY1* with pMS402 containing *cdrA* promoter | This work |
| PA14 *pilE* | Deletion of *pilE* | This work |
| PA14 *pilE* + pMS402-P*fimU* | Deletion of *pilE* with pMS402 containing *fimU* promoter | This work |
| PA14 *pilE* + pMS402-P*cdrA* | Deletion of *pilE* with pMS402 containing *cdrA* promoter | This work |
| PA14 *sadC* *roeA* | Deletion of *sadC* and *roeA* | [13] |
| PA14 *sadC* | Deletion of *sadC* | This work |
| PA14 *sadC* + pBADGr | Deletion of *sadC* with pBADGr | This work |
| PA14 *sadC* + pMS402-P*cdrA* + pBADGr | Deletion of *sadC* with pMS402 containing *cdrA* promoter and pBADGr | This work |
| PA14 *sadC* + pBADGr-*sadC* | Deletion of *sadC* complemented with *sadC* | This work |
| PA14 *sadC* + pMS402-P*cdrA* + pBADGr-*sadC* | Deletion of *sadC* with pMS402 containing *cdrA* promoter and complemented with *sadC* | This work |
| PA14 *fimS* | Deletion of *fimS* | This work |
| PA14 *fimS* + pMS402-P*fimU* | Deletion of *fimS* with pMS402 containing *fimU* promoter | This work |
| PA14 *algR* | Deletion of *algR* | This work |
| PA14 *algR* + pBADGr | Deletion of *algR* with pBADGr | This work |
| PA14 *algR* + pMS402-P*cdrA* + pBADGr | Deletion of *algR* with pMS402 containing *cdrA* promoter and PA14 | This work |
| PA14 *algR* + pBADGr-*algR* | Deletion of *algR* complemented with WT *algR* | This work |
| PA14 *algR* + pMS402-P*cdrA* + pBADGr-*algR* | Deletion of *algR* with pMS402 containing *cdrA* promoter and complemented with *algR* | This work |
| PA14 *algR* + pBADGr-*algR*D54A | Deletion of *algR* complemented with phospho-inactive *algR* | This work |
| PA14 *algR* + pMS402-P*fimU* | Deletion of *algR* with pMS402 containing *fimU* promoter | This work |
| PA14 *algR*D54A | PA14 expressing the phospho-inactive form of *algR* | This work |
| PA14 *algR*D54E | PA14 expressing the phospho-mimetic form of *algR* | This work |
| PA14 *algU* | Deletion of *algU* | This work |
| PA14 *pilD* | Deletion of *pilD* | This work |
| PA14 *pilW* *fimS* | Deletion of *fimS* in *pilW* background | This work |
| PA14 *pilW* *algR* | Deletion of *algR* in *pilW* background | This work |
| PA14 *pilW* *algR*D54A | Deletion of *pilW* in phospho-inactive *algR* background | This work |
| PA14 *pilW* *algU* | Deletion of *algU* in *pilW* background | This work |
| PA14 *pilX* *fimS* | Deletion of *fimS* in *pilX* background | This work |
| PA14 *pilX* *algR* | Deletion of *algR* in *pilX* background | This work |
| PA14 *pilX* *algR*D54A | Deletion of *pilX* deletion in phospho-inactive *algR* background | This work |
| PA14 *pilX* *algU* | Deletion of *algU* in *pilX* background | This work |
| PA14 *pilY1* *fimS* | Deletion of *fimS* in *pilY1* background | This work |
| PA14 *pilY1* *fimS* + pMS402-P*fimU* | Deletion of *pilY1*/*fimS* with pMS402 containing *fimU* promoter | This work |
| PA14 *pilY1* *algR* | Deletion of *algR* in *pilY1* background | This work |
| PA14 *pilY1* *algR* + pMS402-P*fimU* | Deletion of *pilY1*/*algR* with pMS402 containing *fimU* promoter | This work |
| PA14 *pilY1* *algR*D54A | Deletion of *pilY1* in phospho-inactive *algR* background | This work |
| PA14 *pilY1* *algU* | Deletion of *algU* in *pilY1* background | This work |

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