**S1 Table. Primers used in this study.**

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| Primer Name Sequence Description\*  |
| AR01\_VC0303-P1  | AACTTATGCTGTGGCCCTGT  | In-frame deletion of *crbS* in SIO via SOE PCR |
| AR02\_VC0303-P2  | **TAACGAGCGGCCGCA**AAACAGCACGCCGAGATAC  | In-frame deletion of *crbS* in SIO via SOE PCR; tag in bold  |
| AR03\_VC0303-P3  | **TGCGGCCGCTCGTTA**CCCATTAAGCCCCTCAAAC  | In-frame deletion of *crbS* in SIO via SOE PCR; tag in bold  |
| AR04\_VC0303-P4  | TTGGCTGGAATGTGTGTGTT  | In-frame deletion of *crbS* in SIO via SOE PCR  |
| PT47\_acs\_prom\_P1b  | GACAACTAGTTTATTGGCAATCGTCCCTTG  | Amplification of a 660-bp fragment of the *Acs* promoter, forward, SpeI |
| PT49\_acs\_prom\_P2  | CATTGGATCCAATCCAGTCGACGATTTTGC  | Amplification of a 660-bp fragment of the *Acs* promoter, reverse, BamHI |
| PT50\_pBBR\_F  | AATTTCCATTCGCCATTCAG  | Amplification of a 488-bp fragment surrounding the SpeI/BamHI cloning sites in pBBR*lux* plasmid, forward  |
| PT51\_pBBR\_R  | TTTTCCATCTTTGCCCTACC  | Amplification of a 488-bp fragment surrounding the SpeI/BamHI cloning sites in pBBR*lux* plasmid, reverse |
| MMS13\_acs\_GP1  | ACTCACTATAGGGCCCCCCCCGGCTACCACATTCGTTACG  | In-frame deletion of *acs* in SIO via Gibson cloning |
| MMS14\_acs\_GP2  | GGCAATCAGGCGGTCAACCGG ATAAATATGGGCTTCAC  | In-frame deletion of *acs* in SIO via Gibson cloning |
| MMS15\_acs\_GP3  | GTGAAGCCCATATTTATCCGGTTGACCGCCTGATTGCC  | In-frame deletion of *acs* in SIO via Gibson cloning |
| MMS16\_acs\_GP4  | GGCGGCCGCTCTAGAACGCGG TTAGATTGCAGATGT  | In-frame deletion of *acs* in SIO via Gibson cloning |
| ED01\_VC2702\_P1  | GACAACTAGTATCTCAGGCTTGGTCTGCTC  | In-frame deletion of *crbR* in SIO via SOE PCR, SpeI |
| ED02\_VC2702\_P2  | **TAACGAGCGGCCGCA**GTCCATGACGTCACAGGT  | In-frame deletion of *crbR* in SIO via SOE PCR, tag in bold |
| ED03\_VC2702\_P3SIO  | **TGCGGCCGCTCGTTA**AAAAACCGCACGCAAGCAGT  | In-frame deletion of *crbR* in SIO via SOE PCR, tag in bold |
| ED05\_VC2701\_P4 | CATTGGATCCACCATCGGAATTGATGGAGA   | In-frame deletion of *crbR* in SIO via SOE PCR, BamHI |
| PT22\_VC0303RCD\_SIO1  | GGGCCGGGCGATCCGGAAGA  | In-frame deletion of *crbS* receiver domain in SIO via SOE PCR |
| PT35\_VC0303RCD\_TP2C  | **TCTCAGTTTGAGGGGCTT**CACACGCAGATGTTGCAGCTCTGAACC  | In-frame deletion of *crbS* receiver domain in SIO via SOE PCR, tag in bold |
| PT36\_VC0303RCD\_TP3C  | **AAGCCCCTCAAACTGAGA**GCCTTACTGAATAGTCTGTC  | In-frame deletion of *crbS* receiver domain in SIO via SOE PCR, tag in bold |
| PT25\_VC0303RCD\_4  | GGCTGGAATGTGTGTGTTGG  | In-frame deletion of *crbS* receiver domain in SIO via SOE PCR |
| ED80\_VC2702REC\_P1  | GACAACTAGTATCTCAGGCTTGGTCTGCTC  | In-frame deletion of *crbR* receiver domain in SIO via SOE PCR, SpeI  |
| ED81\_VC2702REC\_P2  | TTGATTGAGCGCGGCAATCAGGGTCGAGTCCATGACGTCACA  | In-frame deletion of *crbR* receiver domain in SIO via SOE PCR |
| ED82\_VC2702REC\_P3  | TGTGACGTCATGGACTCGACCCTGATTGCCGCGCTCAATCAA  | In-frame deletion of *crbR* receiver domain in SIO via SOE PCR, reverse complement of ED81 |
| ED83\_VC2702REC\_P4  | CATTGGATCCTTATGGTGTCGTTGGTGGTG  | In-frame deletion of *crbR* receiver domain in SIO via SOE PCR, BamHI |
| AEP234\_CrbS\_H798\_P1 | GACAACTAGTGGTGTGTCTTTGGTGACACG | Point mutation of CrbS His-798 to Ala or Gln in SIO via SOE PCR, SpeI |
| AEP235\_CrbS\_H798A\_P2 | GGCTGCATCAAATCcgcACTGACCGCCGCC | Point mutation of CrbS His-798 to Ala in SIO via SOE PCR |
| AEP236\_CrbS\_H798A\_P3 | GGCGGCGGTCAGTgcgGATTTGATGCAGCC | Point mutation of CrbS His-798 to Ala in SIO via SOE PCR |
| AEP237\_CrbS\_H798\_P4 | CATTGAGCTCCAAACGCAAGCGACACTG | Point mutation of CrbS His-798 to Ala or Gln in SIO via SOE PCR, SacI |
| AEP238\_CrbS\_H798Q\_P2 | GGCTGCATCAAATCttgACTGACCGCCGCC | Point mutation of CrbS His-798 to Gln in SIO via SOE PCR |
| AEP239\_CrbS\_H798Q\_P3 | GGCGGCGGTCAGTcaaGATTTGATGCAGCC | Point mutation of CrbS His-798 to Gln in SIO via SOE PCR |
| AEP233\_CrbS\_HisInt | CATTGGATCCcgaaacgcattagtcaggaa | Sequencing of H798 mutations in SIO genome |
| AEP240\_CrbS\_D1081A\_P1 | GACAACTAGTACGTTCTGAGCGCGAATC | Point mutation of CrbS Asp-1081 to Ala in SIO via SOE PCR, SpeI |
| AEP241\_CrbS\_D1081A\_P2 | CGTTATCCAAGCGGTAcgcAGACAAAATCACATC | Point mutation of CrbS Asp-1081 to Ala in SIO via SOE PCR |
| AEP242\_CrbS\_D1081A\_P3 | GATGTGATTTTGTCTgcgTACCGCTTGGATAACG | Point mutation of CrbS Asp-1081 to Ala in SIO via SOE PCR |
| AEP243\_CrbS\_D1081A\_P4 | CATTGAGCTCGGTTCAAGACCTACGCCAAG | Point mutation of CrbS Asp-1081 to Ala in SIO via SOE PCR, SacI |
| ED47\_CrbRdelRCD\_intR | GTTGCAAGTAGGCAGCGTAT | Sequencing of D1081A mutation in SIO genome |
| pPSV\_PSEEN4122\_F1  | ATATGAATTCGAGGAGGATACATATGGCCACATACGAAATCCTGATTG  | Cloning *crbR* into the pPSV38 expression vector, EcoRI |
| pPSV\_PSEEN4122\_R1  | ATATAAGCTTTTAGCTGCCCGAAACCGATTC  | Cloning *crbR* into the pPSV38 expression vector, HindIII |
| pPSV\_PA3604\_F1  | ATATGAATTCGAGGAGGATACATATGGCTTCTTACGAGATCCTGATCG  | Cloning *erdR* into the pPSV38 expression vector, EcoRI |
| pPSV\_PA3604\_R1  | ATATAAGCTTTCAATGAGAAGCGGGAACCGTCTC  | Cloning *erdR* into the pPSV38 expression vector, HindIII |
| ΔPSEEN1405\_F1  | ATATAAGCTTGCTTCGCCCAGGTGGCATTG  | In-frame deletion of *crbS* in *P. entomophila*, HindIII  |
| ΔPSEEN1405\_R2  | TGAGGCGGTTACGACATGCAAACTCCGGAGCAAAAAATAG  | In-frame deletion of *crbS* in *P. entomophila*  |
| ΔPSEEN1405\_F3  | GCATGTCGTAACCGCCTCATCCGCCAGCGCCCGCTCGA  | In-frame deletion of *crbS* in *P. entomophila*  |
| ΔPSEEN1405\_R4  | ATATGAATTCGAAAGCTACCAGCAGGAGGC  | In-frame deletion of *crbS* in *P. entomophila*, EcoRI |
| ΔPSEEN4122\_F1  | ATATAAGCTTGTTGATGCATGACACCGAAC  | In-frame deletion of *crbR* in *P. entomophila,* HindIII  |
| ΔPSEEN4122\_R2  | GTTCGGGCACTTAGGCCATCGATCTAGGGATCCTGTTC  | In-frame deletion of *crbR* in *P. entomophila*  |
| ΔPSEEN4122\_F3  | CGATGGCCTAAGTGCCCGAACGTTCACGCTTTTTTGAC  | In-frame deletion of *crbR* in *P. entomophila*  |
| ΔPSEEN4122\_R4  | ATATGGTACCCATCCATTGGCCAAGGTCGG  | In-frame deletion of *crbR* in *P. entomophila*, KpnI |
| ΔPSEEN3888\_F1  | ATATGGATCCAGGCGGCCCCGGCGATCTTTG  | In-frame deletion of *acsA* in *P. entomophila,* BamHI  |
| ΔPSEEN3888\_R2  | TCCTCATGCGGCCGCCATCTGTGTTACCTCGGTGTAAT  | In-frame deletion of *acsA* in *P. entomophila*  |
| ΔPSEEN3888\_F3  | ACACAGATGGCGGCCGCATGAGGAATGTTCGCCGGCAAGG  | In-frame deletion of *acsA* in *P. entomophila*  |
| ΔPSEEN3888\_R4  | ATATGGTACCGTGATCGACATGGACGACAG  | In-frame deletion of *acsA* in *P. entomophila,* KpnI  |
| ΔPA3271\_F1  | ATATGGATCCCGGTGATGCTGTAGACGAAGG  | In-frame deletion of *mxtR* in *P. aeruginosa,* BamHI  |
| ΔPA3271\_R2  | GAGGCCCGCTCACGACATGCGAACTCCGATGATGTCCC  | In-frame deletion of *mxtR* in *P. aeruginosa*  |
| ΔPA3271\_F3  | CGCATGTCGTGAGCGGGCCTCAGTGACGGCGGATCAGCA  | In-frame deletion of *mxtR* in *P. aeruginosa*  |
| ΔPA3271\_R4  | ATATGAATTCGCGCCGATCGTGCTCCTGCC  | In-frame deletion of *mxtR* in *P. aeruginosa*, EcoRI |
| ΔPA3604\_F1  | ATATAAGCTTCCGGCCTGGACGATGGCGTC  | In-frame deletion of *erdR* in *P. aeruginosa,* HindIII  |
| ΔPA3604\_R2  | AGCCGTCTCTCAAGCCATGACATGTCCTAGTTTGTTCG  | In-frame deletion of *erdR* in *P. aeruginosa*  |
| ΔPA3604\_F3  | GTCATGGCTTGAGAGACGGCTTAACGCTTTTTTGACCAG  | In-frame deletion of *erdR* in *P. aeruginosa*  |
| ΔPA3604\_R4  | ATATGAATTCCAGAGCTGCCATACCAACAAG  | In-frame deletion of *erdR* in *P. aeruginosa,* EcoRI  |
| ΔPSEEN1405\_REC\_F1  | ATATAAGCTTCACTCCTCCGAACGGCTGTT  | In-frame deletion of *crbS* receiver domain in *P. entomophila,* HindIII  |
| ΔPSEEN1405\_REC\_R2  | CTGAACCAGGCTCACCTGCAACCCGGCCAGGG  | In-frame deletion of *crbS* receiver domain in *P. entomophila*  |
| ΔPSEEN1405\_REC\_F3  | GGGTTGCAGGTGAGCCTGGTTCAGTAACCGCC  | In-frame deletion of *crbS* Receiver Domain in *P. entomophila*  |
| ΔPSEEN1405\_REC\_R4  | ATATGAATTCGCAGCGTTTCGCCCAGACCA  | In-frame deletion of *crbS* Receiver Domain in *P. entomophila,* EcoRI  |
| ΔPSEEN4122\_REC\_F1  | ATATAAGCTTATACCAAGGTCTGCAGCCAT  | In-frame deletion of *crbR* Receiver Domain in *P. entomophila,* HindIII  |
| ΔPSEEN4122\_REC\_R2  | GACCTTTTCGAAGATTTCGTATGTGGCCATCGATC  | In-frame deletion of *crbR* Receiver Domain in *P. entomophila*  |
| ΔPSEEN4122\_REC\_F3  | ACATACGAAATCTTCGAAAAGGTCGATGTATCGGC  | In-frame deletion of *crbR* Receiver Domain in *P. entomophila*  |
| ΔPSEEN4122\_REC\_R4  | ATATGGTACCCATGCGCCATCACCGCGCCA  | In-frame deletion of *crbR* Receiver Domain in *P. entomophila,* KpnI  |
| ΔPA2586\_gacA\_F1  | ATATGGATCCCGACCTTGCGTCATTCC | In frame deletion of *gacA*, BamHI |
| ΔPA2586\_gacA\_F2  | AATGCGCGACGAGGTGCAGCGTGTAGATGAGCGCC | In frame deletion of *gacA* |
| ΔPA2586\_gacA\_R3  | CTCATCTACACGCTGCACCTCGTCGCGCATTAGCA | In frame deletion of *gacA* |
| ΔPA2586\_gacA\_R4  | ATATGGTACCGGCGATCGCCGAAACC | In frame deletion of *gacA*, KpnI |
| ΔPA3271\_REC\_F1  | GCGCCTGTACTGGATGCGCC  | In-frame deletion of *crbS* Receiver Domain in *P. aeruginosa*  |
| ΔPA3271\_REC\_R2  | TCAGCGCAGGCTCACCTGGGCGCCGTTCAGCGCCT  | In-frame deletion of *crbS* Receiver Domain in *P. aeruginosa*  |
| ΔPA3271\_REC\_F3  | GGCGCCCAGGTGAGCCTGCGCTGAGCGGGCCTCAG  | In-frame deletion of *crbS* Receiver Domain in *P. aeruginosa*  |
| ΔPA3271\_REC\_R4  | GCCGCGGCGGCCGCCTGGGA  | In-frame deletion of *crbS* Receiver Domain in *P. aeruginosa*  |
| ΔPA3604\_REC\_F1  | CGCAACCGAAATAGCCGCGC  | In-frame deletion of *erdR* Receiver Domain in *P. aeruginosa*  |
| ΔPA3604\_REC\_R2  | GGTGTCCCCGTCGATCTCGTAAGAAGCCATGACAT  | In-frame deletion of *erdR* Receiver Domain in *P. aeruginosa*  |
| ΔPA3604\_REC\_F3  | TCTTACGAGATCGACGGGGACACCTGGTGGCCGCC  | In-frame deletion of *erdR* Receiver Domain in *P. aeruginosa*  |
| ΔPA3604\_REC\_R4  | TGCTCGCCGCGGCGGGCCTG  | In-frame deletion of *erdR* Receiver Domain in *P. aeruginosa*  |
| PSEEN3888\_RT\_F1  | AAAGTGGTGATCACTGCCGACGAA  | Real time PCR primer for *acsA* in *P. entomophila*  |
| PSEEN3888\_RT\_R1  | ATGATCTTCTGCACGCTGCTGGTT  | Real time PCR primer for *acsA* in *P. entomophila* |
| PA\_*acsA*\_RT\_F1  | TGGTACGACGACCTGATGAA  | Real time PCR primer for *acsA* in *P. entomophila*  |
| PA\_*acsA*\_RT\_R1  | CCGGAGGTGTAGAGGATGAA  | Real time PCR primer for *acsA* in *P. entomophila*  |
| clpX\_RT\_F1  | CGAATGACTGACACCCGTAAT  | Real time PCR primer for *clpX* in *P. aeruginosa* and *P. entomophila*  |
| clpX\_RT\_R1  | CGCACTCGTCGCAGATAAA  | Real time PCR primer for *clpX* in *P. aeruginosa* and *P. entomophila*  |
| PA3234\_RT\_F1  | GGCATCCTTCCTGGGTATTT  | Real time PCR primer for PA3234 (putative acetate transporter) in *P. aeruginosa*  |
| PA3234\_RT\_R1  | ATCATCCTCTTCCTCATCGC  | Real time PCR primer for PA3234 (putative acetate transporter) in *P. aeruginosa*  |

**\***Restriction sites listed in the description are underlined in the oligonucleotide sequence.

\*\*Nucleotides conferring point mutations are in lower case.