

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

Strain or plasmid	Phenotype, genotype and/or description	Sources
<u><i>P. aeruginosa</i> strains</u>		
FRD1	Alg+, FRD1 $\Delta mucA22$, clinical isolate	(1)
FRD1 <i>algT</i>	Alg-, FRD1 $\Delta mucA22$, <i>algT</i> D18G, spontaneous nonmucoid revertant of FRD1; also known as FRD2	(1)
FRD1 <i>algD</i>	Alg-, FRD1 $\Delta mucA22$, <i>algD</i> ::Tc ^R ; also known as FRD870	(2)
FRD1-Strep ^R	FRD1 spontaneous streptomycin resistant isolate	This study
FRD1 <i>algT</i> -Rif ^R	FRD1 <i>algT</i> spontaneous rifampicin resistant isolate	This study
FRD1 <i>algD</i> -Rif ^R	FRD1 <i>algD</i> spontaneous rifampicin resistant isolate	This study
Clinical mucoid isolates	Alg+, strains isolated from CF patient sputum samples; Include: CF32, CF43, 2902, 2904, 2919, 2920, 2957, 2959, and 2963	This study
Paired mucoid/ <i>algT</i> revertant isolates	Strains obtained from O. Ciofu at Univ. of Copenhagen; Include: 6057, 6057 <i>algT</i> , 6059, 6059 <i>algT</i> , 6061, 6061 <i>algT</i> , 6067, 6067 <i>algT</i> , 6069, 6069 <i>algT</i> , 6071, 6071 <i>algT</i>	(3)
<i>algT</i> $\Delta katA$	FRD1 <i>algT</i> with an in-frame, unmarked deletion of <i>katA</i>	This study
<i>algT</i> $\Delta katB$	FRD1 <i>algT</i> with an in-frame, unmarked deletion of <i>katB</i>	This study
<i>algT</i> $\Delta katA$ /pHERD	FRD1 <i>algT</i> $\Delta katA$ with empty vector pHERD20T	This study
<i>algT</i> $\Delta katA$ /pKatA	FRD1 <i>algT</i> $\Delta katA$ with <i>katA</i> in pHERD20T	This study
FRD1 <i>algB</i>	Alg-, FRD1 $\Delta mucA22$, <i>algB</i> ::Tn501; also known as FRD444	(4)
FRD1 <i>algR</i>	Alg-, FRD1 $\Delta mucA22$, <i>algR</i> :: Ω sm ^R ; also known as FRD810	(4)
FRD1 <i>amrZ</i>	Alg-, FRD1 $\Delta mucA22$, <i>amrZ</i> :: <i>xylE-aacC1</i> ; also known as FRD1200	(5)
<i>algT</i> Δlys /pHERD	FRD1 <i>algT</i> Δlys with empty vector pHERD20T	This study
<i>algT</i> Δlys /pLys	FRD1 <i>algT</i> Δlys with <i>lys</i> in pHERD20T	This study
FRD1/pHERD	FRD1 with empty vector pHERD20T	This study
<i>algT</i> /pHERD	FRD1 <i>algT</i> with empty vector pHERD20T	This study
FRD1/pMucA	Alg-, FRD1 with <i>mucA</i> in pHERD20T	(6)
<u><i>E. coli</i> strains</u>		
HB101	<i>recA13 leuB6 ara-14 proA2 lacY1 galk2 xyl-5 mtl-1 rpsL20(SmR) glnV44 λ-</i>	Laboratory strain
NEB5 α	<i>fhuA2 Δ(argF-lacZ)U169 phoA glnV44 Φ80 Δ(lacZ)M15 gyrA96 recA1 relA1 endA1 thi-1 hsdR17</i>	New England Biolabs
S17/ λ pir	<i>thi recA thr leu tonA lacY supE</i> RP4–2-Tc::Mu1::pir Km ^R	Laboratory strain
<u>Plasmids</u>		
pEX18Ap	Ap ^R (Carb ^R); suicide replacement vector containing <i>B. subtilis</i> <i>sacB</i> gene	(7)
pSM1	Ap ^R (Carb ^R); pEXAp bearing <i>P. aeruginosa</i> in-frame deletion of <i>katA</i>	This study
pSM2	Ap ^R (Carb ^R); pEXAp bearing <i>P. aeruginosa</i> in-frame deletion of <i>katB</i>	This study
pSM3	Ap ^R (Carb ^R); pEXAp bearing <i>P. aeruginosa</i> in-frame deletion of <i>lys</i>	This study
pHERD20T	pUCP20T P/lac replaced with 1.3-kb AflIII-EcoRI fragment of <i>araC</i> -PBAD cassette (5,087 bp)	(8)
pHERD20T- <i>katA</i>	<i>katA</i> in pHERD20T XbaI/HindIII	This study

pHERD20T- <i>lys</i> pHERD20T- <i>mucA</i>	<i>lys</i> in pHERD20T XbaI/HindIII <i>mucA</i> in pHERD20T EcoRI/HindIII	This study (6)
<u>Oligonucleotides</u>		
<i>katAdel-1</i>	CGGGATCCGTTGAAGAGCAGGAAGACGAG	This study
<i>katAdel-2</i>	TCATCAGGCCATCAGTCCAG CATTTACTCTCTCCTCAACGGC	This study
<i>katAdel-3</i>	GCCGTTGAG GAGAGAGTAAATGCTGGACTGAT GGCCTGATGA	This study
<i>katAdel-4</i>	CCCCAAGCTTGCAAGACCCTGTACATCCTC	This study
<i>katBdel-1</i>	CGGGATCCATGAAGATGGCGAAGGCCAC	This study
<i>katBdel-2</i>	GTTGCGATCAATCCTGGAG CATGGAAGAGCTCCTAATGGC	This study
<i>katBdel-3</i>	GCCATTAG GAGCTCTTCCATGCTCCAGGATT GATCGCAACC	This study
<i>katBdel-4</i>	CCCAAGCTTGCCGTTGTCGTGAATGAATC	This study
<i>katAcomp-1</i>	GCTCTAGATAGCACGTTAGCCGTTGAGG	This study
<i>katAcomp-2</i>	CCCAAGCTTCAGGCCATCAGTCCAGCTT	This study
<i>lysdel-1</i>	CGGGATCCTGAATGACCGCCTGCTCAAG	This study
<i>lysdel-2</i>	CTCATGACAGCACCGCCCT CTGCTCGGTCAGTTTCATCG	This study
<i>lysdel-3</i>	CGATGAAACTGACCGAGCAG AGGGCGGTGCTGTCATGAG	This study
<i>lysdel-4</i>	CCCAAGCTTGCATGCTGGCTGTAACCTCT	This study
<i>lyscomp-1</i>	GCTCTAGA CGCCTGAAACCCATCGGAGT	This study
<i>lyscomp-2</i>	CCCAAGCTTCTCATGACAGCACCGCCCT	This study
<i>rpoD</i> RT-F2	GCCGAGCTGTTTCATGCCGAT	(9)
<i>rpoD</i> RT-R2	GAACAGGCGCAGGAAGTCGG	(9)
<i>algD</i> RT 67-F	TGTGGATGTCTCCAGCACCAAGAT	(9)
<i>algD</i> RT 68-R	AGATGAACGATACGTCGGAGTCCA	(9)
<i>katA</i> RT 10-F	CATCGAGAACCTGACCAACG	This study
<i>katA</i> RT 10-R	TCAGGTCGAACGGGTTGTAG	This study
<i>lys</i> RT 1-F	GAACCTCAATTACAGCGCCC	This study
<i>lys</i> RT 1-R	GTAGGTGTTGTCGGCAATCG	This study

* Alg-, non-mucoid phenotype, Alg+, mucoid phenotype

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