On-line Supplement for:

PhoQ mutations promote lipid A modification and polymyxin resistance of *Pseudomonas aeruginosa* found in colistin-treated cystic fibrosis patients

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17 **Table S1.** Oligonucleotide primers for sequencing.

Primer name	Primer no.	Sequence (5' to 3')
pDONR201 attL1 (F)	SM877	TCGCGTTAACGCTAGCATGGATCTC
pDONR201 attL2 (R)	SM878	GTAACATCAGAGATTTTGAGACAC
in *phoPQ* – 1 (F)	SM1010	CTGGAAGCGCGCCTGAACG
in *phoPQ* – 2 (F)	SM1011	GGCGGTGCTGTTCATGCTGG
in *phoPQ* – 3 (F)	SM1012	GCAGCTCTACCTGTGGCTCG
in *phoPQ* – 4 (F)	SM1013	TGCGACGCGCTGGACAAGG
in *phoPQ* – 1 (R)	SM1014	GATGGTCGACTGGACGAACC
in *phoPQ* – 2 (R)	SM1015	TCCAGGGCGATGCCGAAGG
in *phoPQ* – 3 (R)	SM1016	CCCCAGGTCAGACCCAGCC
in *phoPQ* – 4 (R)	SM1017	TGGACGGCGAGAAGTCCCG

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Table S2. Oligonucleotide primers for deletion constructs.

Primer name	Primer no.	Sequence (5’ to 3’)
Δ*phoPQ* - 5' flanking	SM936	GGAACAGGCAGATCACGAGAA
Δ*phoPQ* - 5’ delete (F) + attB1	SM937	GGGGACAAGTTTGTACAAAAAAGC AGGCTGACTGTAGAAAGCCTAGACCC
Δ*phoPQ* - 5’ delete (R)	SM938	GTCTCAGACTGTAGCGAAACGAAGC TTTACCAGCAGTTTCATGAG
Δ*phoPQ* - 3’ delete (F)	SM939	CTCATGAAACTGCTGGTAAAGCTTC GTTTCGCTACAGTCTGAGAC
Δ*phoPQ* - 3’ delete (R) + attB2	SM940	GGGGACCACTTTGTACAAGAAAGC TGGGTAGCACGGCGATGAAACAGGTG
Δ*phoPQ* - 3’ flanking	SM941	GCGGGAATGAGGGTCAAGGC
Δ*phoPQ* - 5’ delete (F)	SS97	GGCTAGTCTAGACAGATCACGAGAAACAGG
Δ*phoPQ* - 5’ delete (R)	SS99	GAACGGCCGCCAAGTCTCAGGATCCCATGAG GTTCCTCCGGATG
Δ*phoPQ* - 3’ delete (F)	SS98	CATCCGGAGGAACCTCATGGGATCCTGAGAC TTGGCGGCCGTTC
Δ*phoPQ* - 3’ delete (R)	SS93	CTCCCAAGCTTCATGATCACCGAGACCAG
Δ*phoQ* - 5' flanking	SM942	ATGTCGGCTACGCTGCCGGG
Δ*phoQ* - 5' delete (F) + attB1	SM943	GGGGACAAGTTTGTACAAAAAAGC AGGCTAGAATGCCTCGATCGAAGGCG
Δ*phoQ* - 5' delete (R)	SM944	GTCTCAGACTGTAGCGAAACGAA GCTTCAGGGAACGGATCACCGG
Δ*phoQ* - 3' delete (F)	SM945	CCGGTGATCCGTTCCCTGAAGCTTC GTTTCGCTACAGTCTGAGAC
Δ*phoQ* - 3' delete (R) + attB2	SM946	GGGGACCACTTTGTACAAGAAAGC TGGGTCGGGAATGAGGGTCAAGGCC
Δ*phoQ* - 3' flanking	SM947	CGGCTGCGCTCCATGATCAC

Table S3. Oligonucleotide primers for expression constructs.

Primer name*	Primer no.	Sequence (5' to 3')
phoPQ (F) + attB1	SM855	GGGGACAAGTTTGTACAAAAAAGC AGGCTCTCATCCGGAGGAACCTCATGAAA
phoPQ (R) + attB2	SM856	GGGGACCACTTTGTACAAGAAAGC TGGGTGTCTCAGACTGTAGCGAAACGTAT
phoP (R) + attB2	SM1022	GGGGACCACTTTGTACAAGAAAGC TGGGTCGGATCACCGGCAGCGCTCGG
phoPQ11 (R) + attB2	SM1023	GGGGACCACTTTGTACAAGAAAGC TGGGTGTCTCAGTCCAGCGCCACGGCCAGGCC
phoPQ12 (R) + attB2	SM1024	GGGGACCACTTTGTACAAGAAAGC TGGGTGTCTCAGTCCAGGCTCAGTTCGCCGTC
phoP^{+}*phoQ24* SOE 5' (R)	SM1036	CCGCGCACCGTATCGATCG
phoP^{+}*phoQ24* SOE 3' (F)	SM1037	CGATCGATACGGTGCGCGG

*SOE = splicing by overlap extension

Table S4. Oligonucleotide primers for promoter fusion construct.

Primer name	Primer no.	Sequence (5’ to 3’)
P_{pmrH} (F)	SS100	GAGAGAGAATTCTGGTCGCCGGCAGCCGCTGAAG
P_{pmrH} (R)	SS101	AGAGAGGGATCCTCACCGGTGGTGATCCAGCCGGAAC
CTX - 5' flanking	SS102	CGAGTGGTTTAAGGCAACGGTCTTGA
CTX - 3' flanking	SS103	AGTTCGGCCTGGTGGAACAACTCG