FIG S1 Heat map of di/tripeptide utilization by *P. aeruginosa* PA14 and its *dppBCDF, nppBCD*, and *dppBCDF/ nppBCD*-deficient mutants. Each square represents the average respiratory activity of a strain in one well of the Biolog Phenotype MicroArray plates. The heat map is based on the values reflecting the extent of respiration after 24 hours at 37°C. Values exceeding 8000 reflect solid respiratory activity during the assay. Values below 2000 were considered as no respiratory activity.
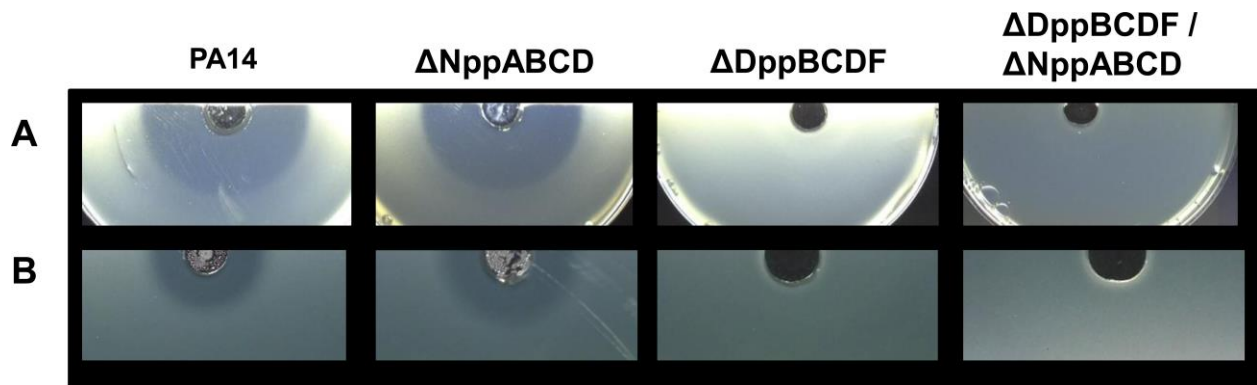
FIG S2 Growth inhibition of *P. aeruginosa* PA14 and its *nppBCD*, *dppBCDF*, and *nppBCD*/*dppBCDF*-deficient mutants by the antimicrobial tripeptides (A) bialaphos (L-alanyl-L-alanyl-phosphinothricin) and (B) phaseolotoxin (N^{δ}(N'-sulfodiaminophosphinyl)-ornithyl-alanyl-homoarginine).
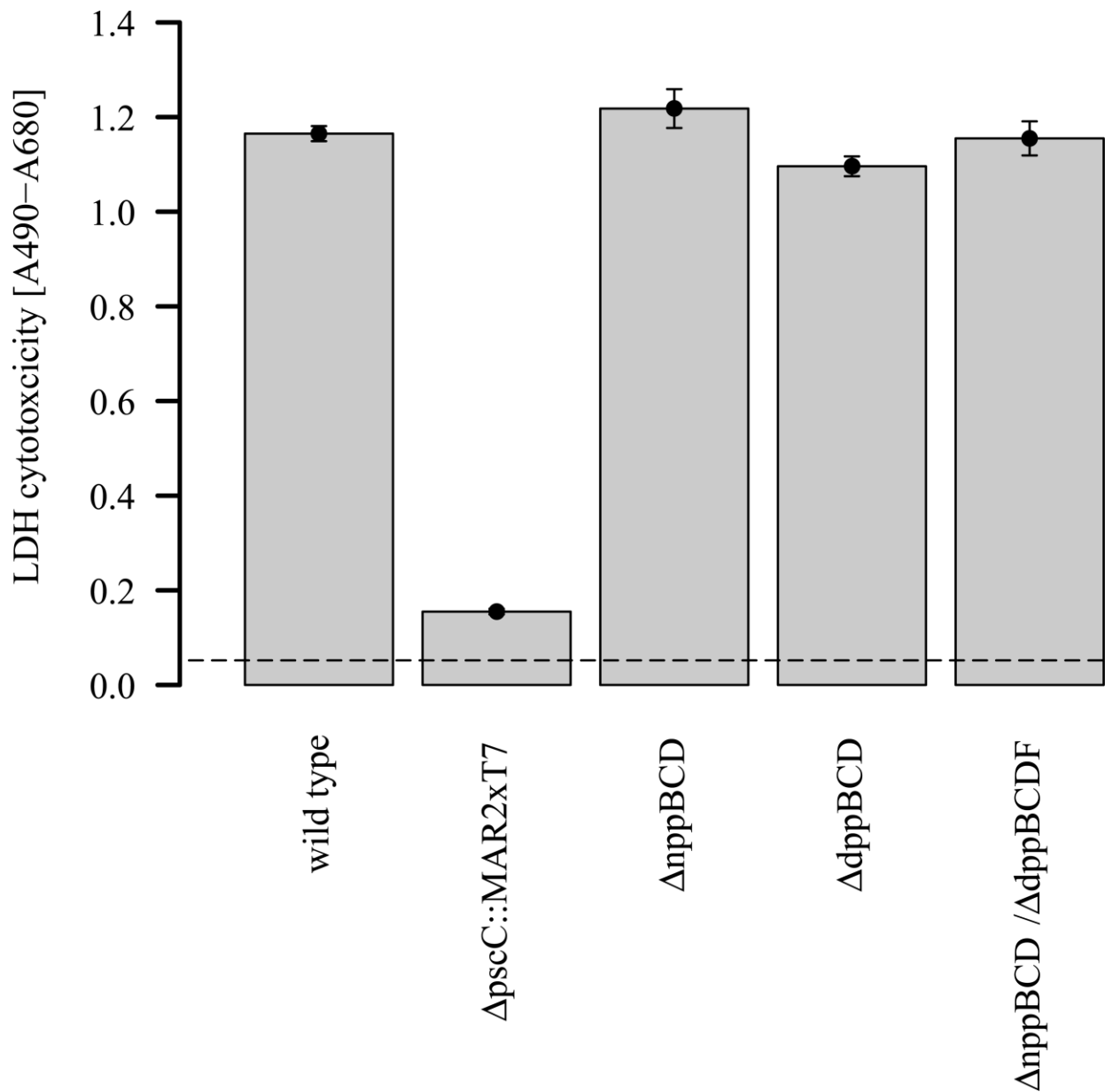
FIG S3 Cytotoxicity assay of the *P. aeruginosa* wild-type strain, its corresponding *nppBCD*, *dppBCDF*, *nppBCD/dppBCDF* mutants, as well as the *pscC*-deficient mutant, which was serving as positive control. The release of lactate dehydrogenase (LDH) from human bronchial epithelial cells, infected with the indicated strains, into culture supernatants was measured 6 hours post incubation and experiments were performed in triplicates. The dashed line indicates the background noise produced by the inducing medium.

TABLE S1 Primers used in this study.

Primer	Sequence (5' - 3')	Characteristic(s)
NppBCD transporter knockout (PA14_41140 – PA14_41160)		
41130-A1	CATCCTGCCGTTCAAGCG	used to clone PA14 *nppBCD* knockout vector
41130-A2	CCCTATAGTGAGTCGGTACCGCGGCGTTACTCCCGTTC	used to clone PA14 *nppBCD* knockout vector
41170-B1	GGTACCGACTCACTATAGGGGTAGCAGACAAGGAACGG	used to clone PA14 *nppBCD* knockout vector
41170-B2	TGTAGTTCGGCATGGTCC	used to clone PA14 *nppBCD* knockout vector
41130_out1	CAAGATTCCCGACGAGGC	Primer flanking PA14 *nppBCD* knockout fragment (used to confirm GM-GFP cassette insertion)
41170_out2	TGCCGACTTCCTCGATGG	Primer flanking PA14 *nppBCD* knockout fragment (used to confirm GM-GFP cassette insertion)
Gm-GFP_out-F	CAGGGCAGTCGCCCTAA	Primer within Gm-GFP cassette (used to confirm GM-GFP cassette insertion)
Gm-GFP_out-R	TACTCCAATTGGCGATGGC	Primer within Gm-GFP cassette (used to confirm GM-GFP cassette insertion)
NppBCD transporter overexpression (PA14_41110 – PA14_41160)		
41110_fwd(SpeI)	CAACTAGTCTGTTGCCTGACGATTCG	used to clone *nppABCD* overexpression vector
41170_rev(SacI)	CTGAGCTCTGGTCCGTTCCTTGTCTG	used to clone *nppABCD* overexpression vector
YejABEF transporter knockout		
yej-ko_fwd	AAAGCATGCCGGATTGCGGCTAATGATGAGTAAAAGGAA ATCCGTTGCAGTGTAGGCTGGAGCTGCTTCG	Primer with a 50-nt homology flanking *yejABEF* of *E. coli* W3110
yej-ko_rev	TTGGTGTGGCAATTGCCGAACCCTTTTCAAACTACAATCC TTTTTAAGCGTGGTCCATATGAATATCCTCC	Primer with a 50-nt homology flanking *yejABEF* of *E. coli* W3110
yej_out1	GCGCGCTTATCTATCTTGAGC	Primer flanking the *yejABEF* knockout fragment
yej_out2	GAATGTGCTTCCGGGGAAA	Primer flanking the *yejABEF* knockout fragment