Roles of Hydrophobicity and Charge Distribution of Cationic Antimicrobial Peptides in Peptide-Membrane Interactions

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SUPPLEMENTARY FIGURES

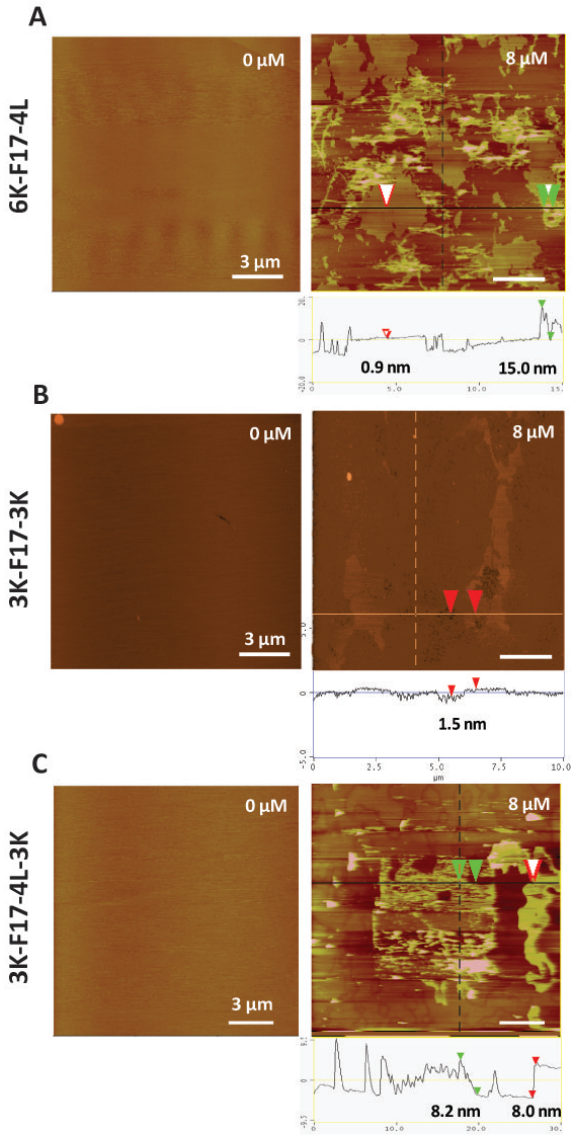

Figure S1. Representative AFM topography images acquired in the absence (left) and presence (right) of synthetic CAPs in a bacterial model lipid bilayer (3:1 POPE/DOPG). (A) 6K-F17-4L; (B) 3K-F17-3K; and (C) 3K-F17-4L-3K. The peptide concentrations used were 8 µM. The AFM scale bar is 3 µm, and the corresponding section analysis for each CAP is labeled below the images. The height differences along the indicated section line are reported between the pairs of arrows. The central square feature seen in S1C (right) is illustrative of a localized tip-induced distortion due to the solubilization effect of 3K-F17-4L-3K that arose during scanning of the inset region.

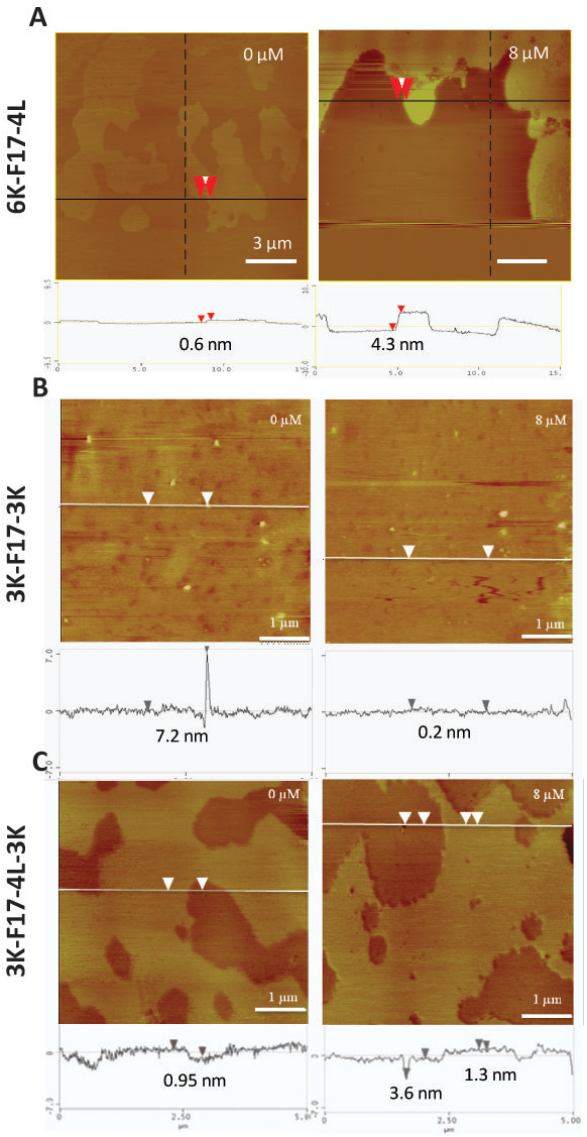

Figure S2. Representative AFM topography images acquired in fluid in the absence (left) and presence (right) of synthetic CAPs in a mammalian model lipid bilayer (1:1:1 DOPC/DSPC/cholesterol). (A) 6K-F17-4L; (B) 3K-F17-3K; and (C) 3K-F17-4L-3K. The peptide concentrations used were 8 µM. The AFM scale bar is (A) 3 µm; (B-C) 1 µm with the corresponding section analysis for each CAP labeled below the images. The height differences along the indicated section line were measured between the pairs of arrows.