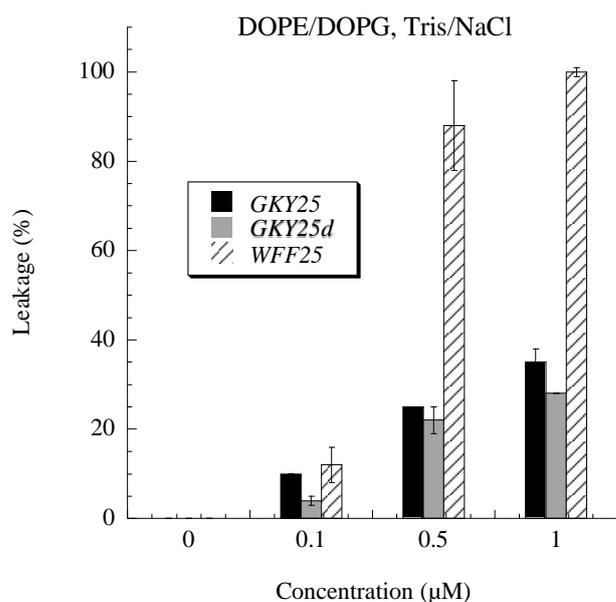


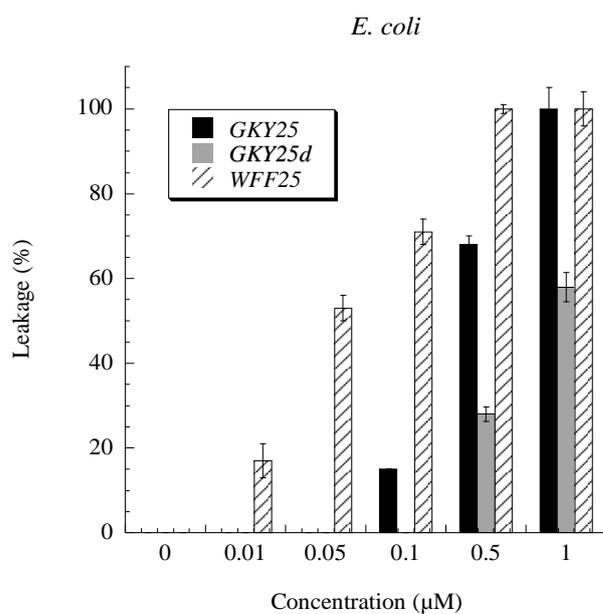
## Supporting Material

**Figure S1.** Peptide-induced leakage, measured by fluorescence spectroscopy, for DOPE/DOPG (75/25 mol/mol) liposomes in 10 mM Tris, pH 7.4 with additional 150 mM NaCl (A), and *E. coli* liposomes in 10 mM Tris, pH 7.4 (B).

(A)

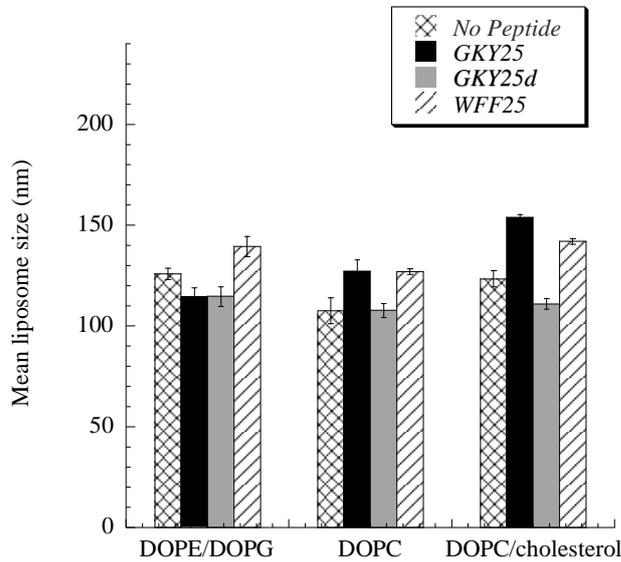


(B)

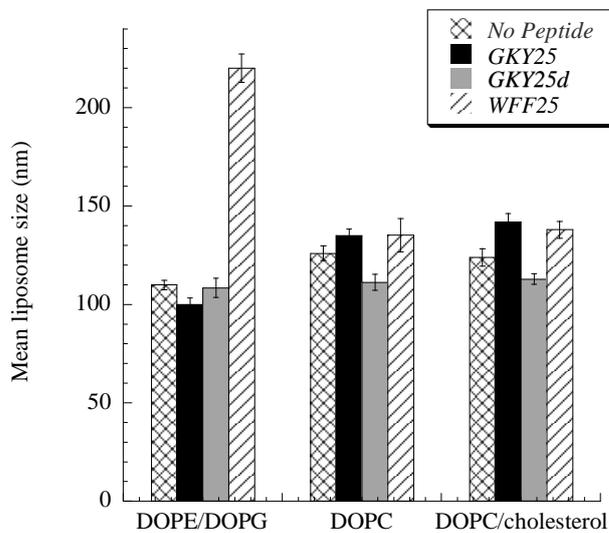


**Figure S2.** Mean liposome size, performed by using NanoSight, at fixed lipid concentration of 10  $\mu\text{M}$  in the absence and presence of peptide at 1  $\mu\text{M}$  (A) and 5  $\mu\text{M}$  (B) in 10 mM Tris, pH 7.4. As seen, WFF25, but not GKY25 and GKY25d, induces liposome flocculation at high peptide concentration, but only for anionic DOPE/DOPG liposomes. As WFF25 leakage induction of DOPE/DOPG liposomes was complete already at 1  $\mu\text{M}$ , however, this peptide-induced flocculation/fusion does not affect membrane lysis in the range investigated.

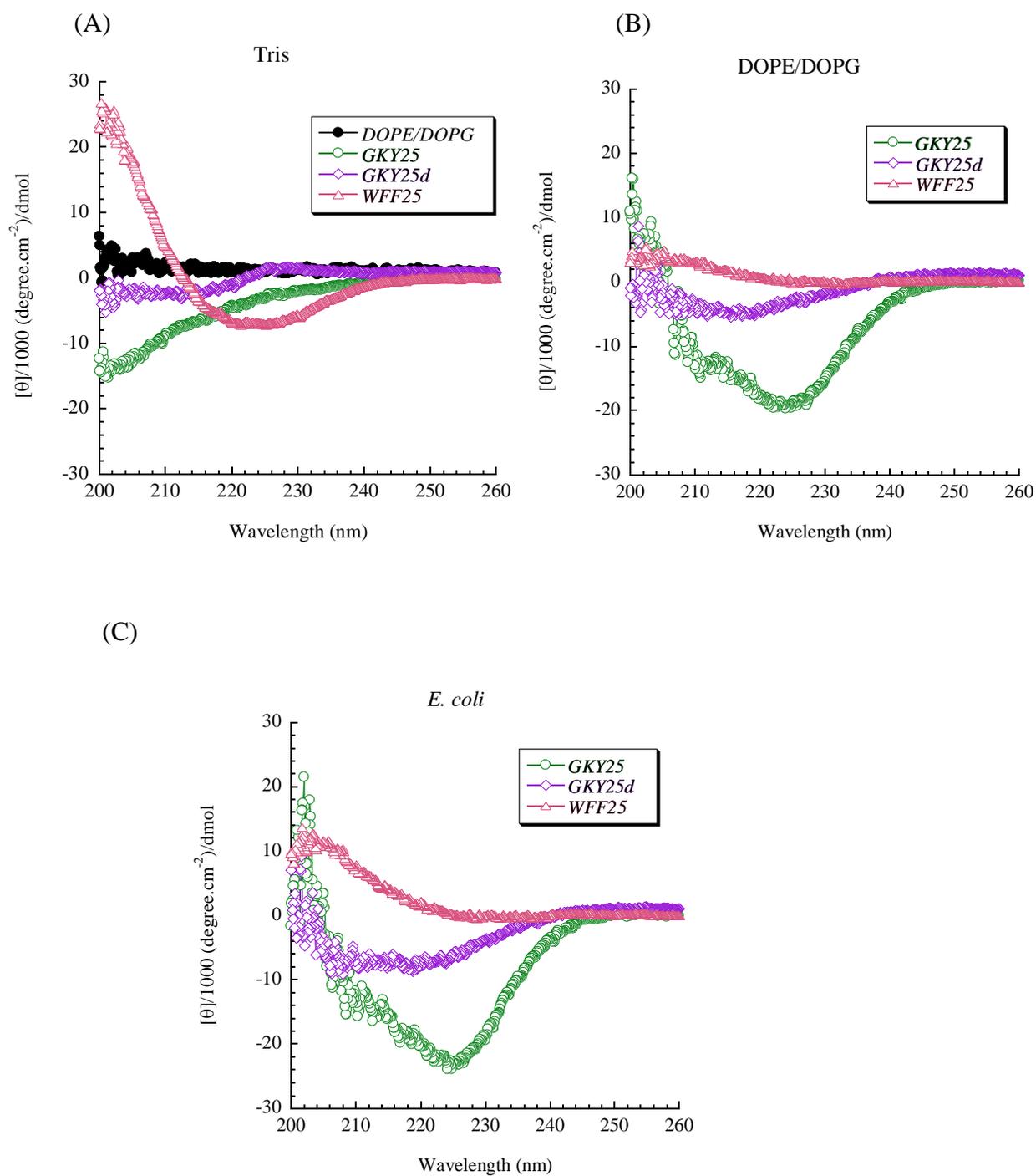
(A)



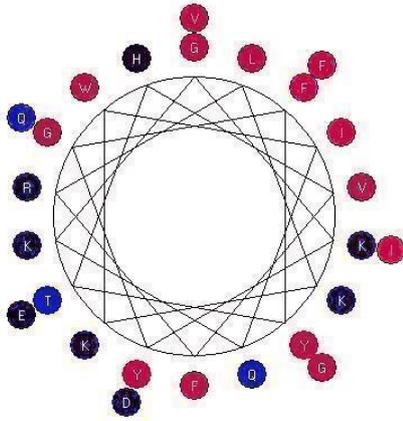
(B)



**Figure S3.** CD spectra for the indicated peptides in 10 mM Tris, pH 7.4 (A), and in the presence of DOPE/DOPG (75/25 mol/mol) (B) and *E. coli* (C) liposomes.



**Figure S4.** Helical wheel projection of GK Y25. Black, blue, and red circles refer to charged, uncharged but polar, and nonpolar/hydrophobic residues, respectively.



**Figure S5.** Antimicrobial activity against *P. aeruginosa* as determined by viable count assay in 10 mM Tris, pH 7.4, with and without additional 150 mM NaCl.

