

Supplementary Information

Intracellular biomass flocculation as a key mechanism of rapid bacterial killing by cationic, amphipathic antimicrobial peptides and peptoids

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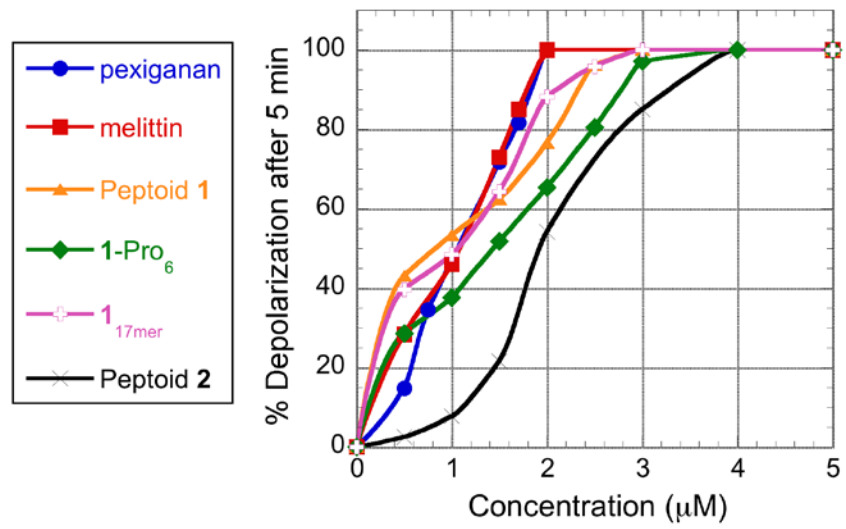


Figure S1. Membrane depolarization of *B. subtilis* ATCC 6633 after 5-min. treatment, as monitored by diSC3-5 fluorescence. The data are representative of 3 independent experiments.

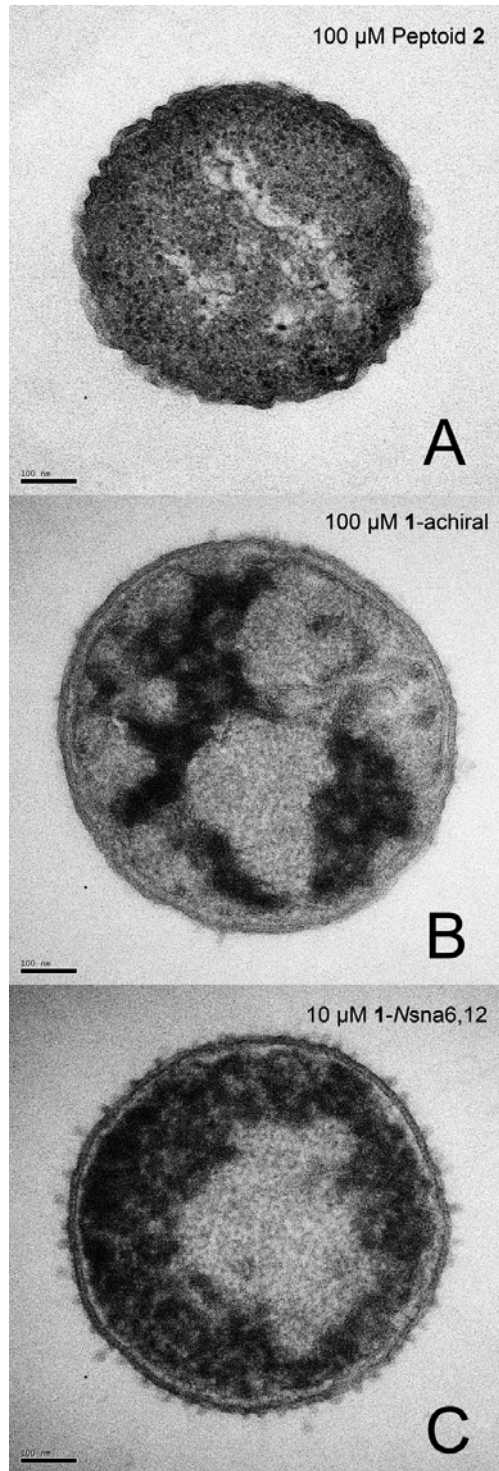


Figure S2. Transmission electron micrographs of *E. coli* bacteria treated with (A) 100 μ M peptoid 2, (B) 100 μ M 1-achiral, or (C) 10 μ M 1-Nsna6,12 for 1 hour.

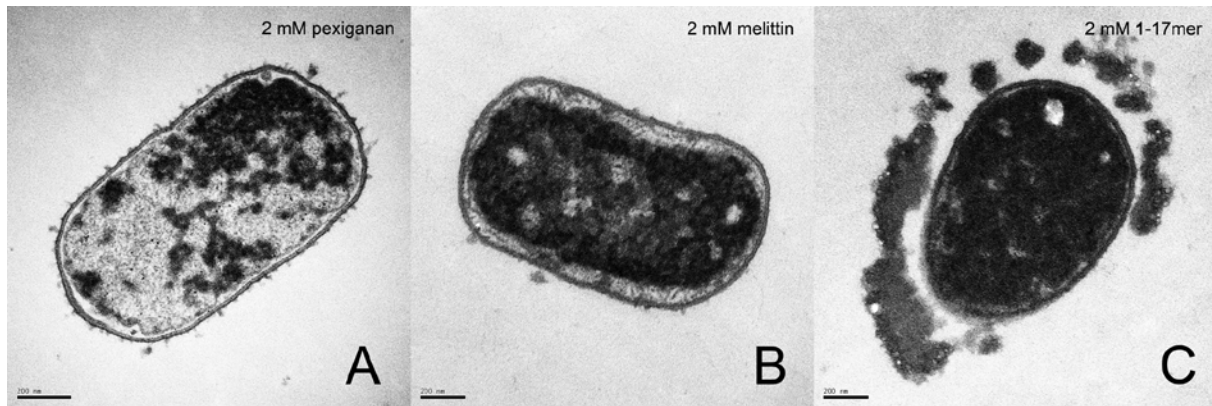


Figure S3. Transmission electron micrographs of longitudinal sections of *E. coli* bacteria treated with 2 mM (A) pexiganan, (B) melittin, and (C) peptoid **1**_{17mer}.

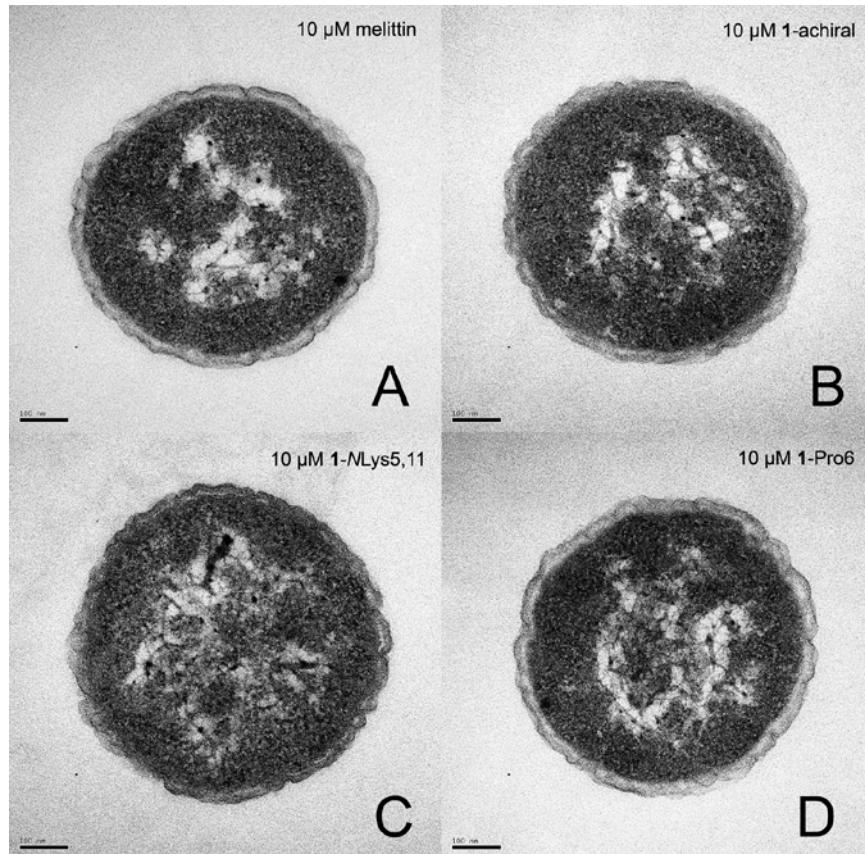


Figure S4. Transmission electron micrographs showing *E. coli* treated with sub-lethal concentrations (i.e. concentrations which killed none of the bacteria in each sample) of (A) 10 μ M melittin, (B) 10 μ M **1**-achiral, (C) 10 μ M **1**-NLys_{5,11}, and (D) 10 μ M **1**-Pro₆.

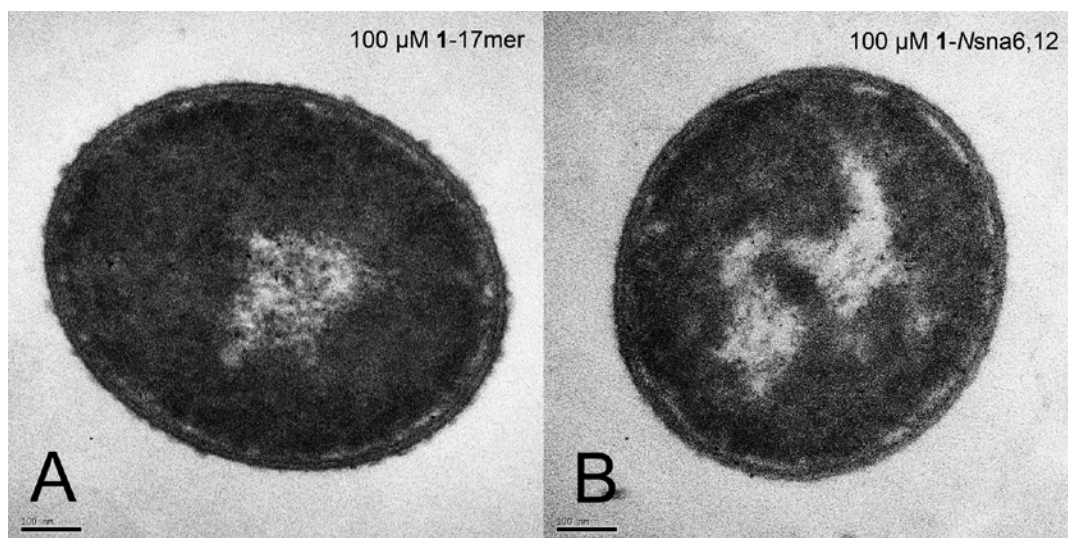


Figure S5. Transmission electron micrographs of *E. coli* treated with 100 μ M peptoids (A) **1**_{17mer} and (B) **1**-N_{sna6,12} for 1 hour.

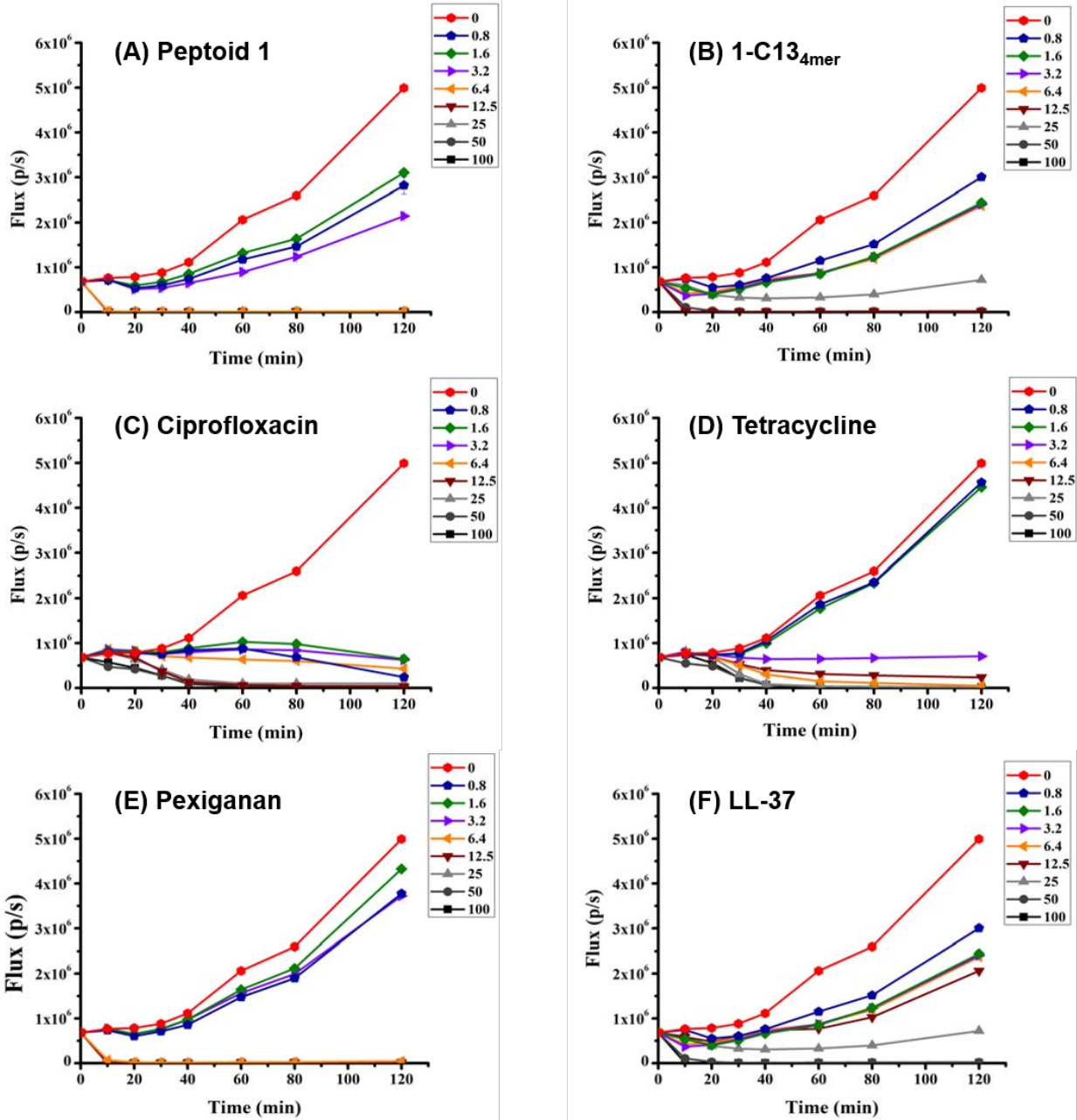


Figure S6. Kinetics of antibacterial activities of (A) Peptoid 1, (B) 1-C13_{4mer}, (C) Ciprofloxacin, (D) Tetracycline, (E) Pexiganan, and (F) LL-37 against bioluminescent *P. aeruginosa* from 0 - 100 μM in LB at 37 $^\circ\text{C}$. Flux represents number of photons emitted by bacteria per second. Reported values are average of three independent experiments with two replicates each.

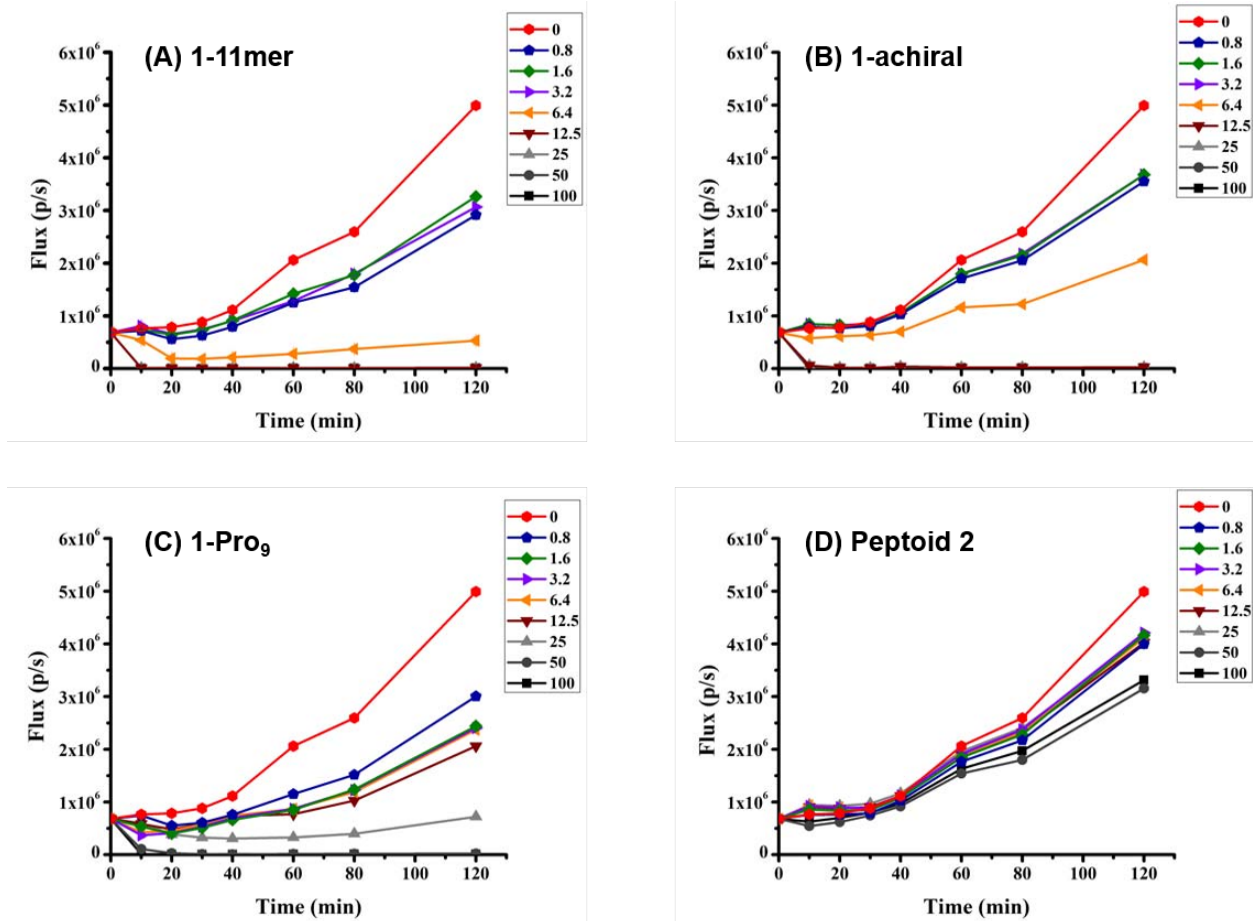


Figure S7. Kinetics of antibacterial activities of (A) 1-11mer, (B) 1-achiral, (C) 1-Pro₉, and (D) Peptoid 2 against bioluminescent *P. aeruginosa* from 0 - 100 μ M in LB at 37 $^{\circ}$ C. Flux represents number of photons emitted by bacteria per second. Reported values are average of three independent experiments with two replicates each.