The role of C-terminal amidation in the mechanism of action of the antimicrobial peptide aurein 1.2

Mahdi Shahmiri and Adam Mechler*

La Trobe Institute for Molecular Science, La Trobe University, Melbourne VIC 3086 Australia

*Corresponding author: A. Mechler
E-mail: a.mechler@latrobe.edu.au

CD spectroscopy

Figure S 1. Circular dichroic spectra of (a) aurein1.2-NH₂ and (b) aurein1.2-COOH, and (c) aurein 1.2-NH-CH₃ in the presence of different membrane compositions, DMPC (green), DMPC/DMPG (red), DMPC/cholesterol (blue), and peptide alone (purple).
QCM experiments

Figures S1-S4 show (f-t) and (D-t) sensograms for aurein1.2–NH-CH₃ with different membranes (red lines). For reference, the respective (f-t) and (D-t) of the wild type peptide Aurein 1.2 are also shown (blue line). In comparison with the wild type peptide, negligible changes were observed for aurein1.2–NH-CH₃, indicating less activity of this peptide.

Figure S 2. Frequency changes of the interactions of (3, 5, 7, 10, and 15 μM) Aurein 1.2-NH-CH₃ with neat DMPC and DMPC/cholesterol (red) and aurein 1.2-NH₂ (blue)
Figure S 3. Dissipation changes of the interactions of (3, 5, 7, 10, and 15 μM) Aurein 1.2-NH-CH₃ with neat DMPC and DMPC/cholesterol (red) and aurein 1.2-NH₂ (blue)
Figure S 4. Frequency changes of the interactions of (3, 5, 7, 10, and 15 μM) Aurein 1.2-NH-CH₃ with DMPC/DMPG (4:1) and DMPC/DMPG (3:2) (red) and aurein 1.2-NH₂ (blue)
Figure S 5. Dissipation changes of the interactions of (3, 5, 7, 10, and 15 \(\mu\)M) Aurein 1.2-NH-CH\(_3\) with DMPC/DMPG (4:1) and DMPC/DMPG (3:2) (red) and aurein 1.2-NH\(_2\) (blue)