

Supplementary Information

Development of Antibacterial Peptides with Efficient Antibacterial Activity, Low Toxicity, High Membrane Disruptive Activity and the Synergistic Antibacterial Effect

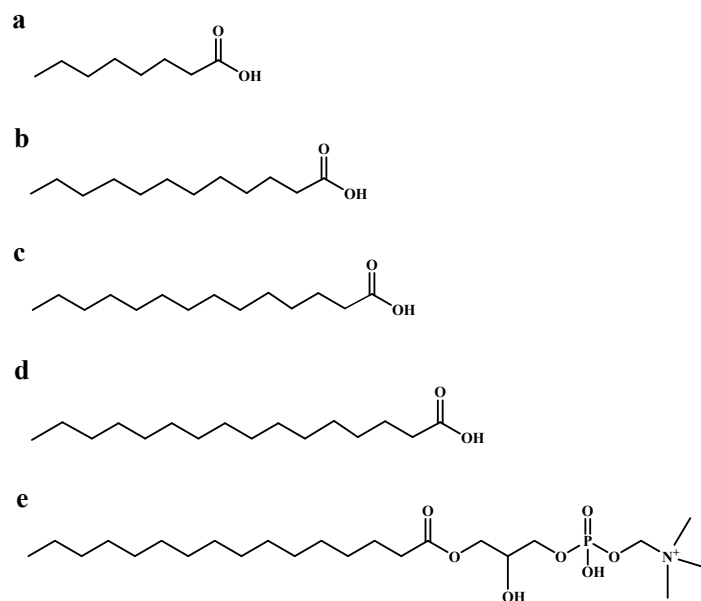
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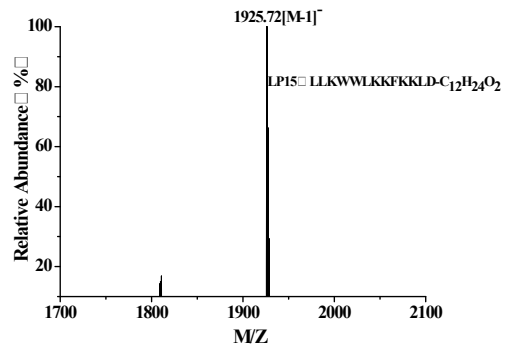
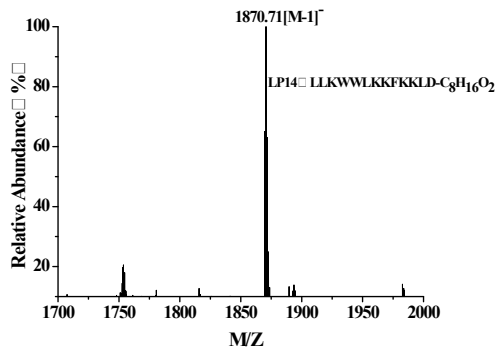
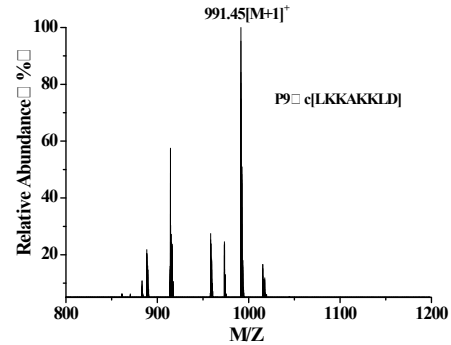
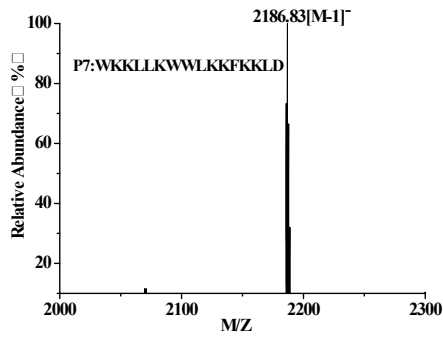
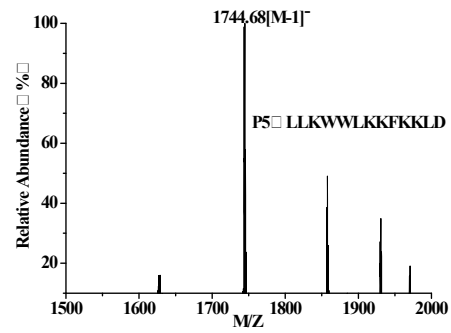
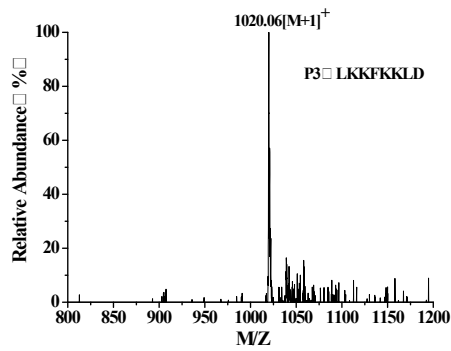
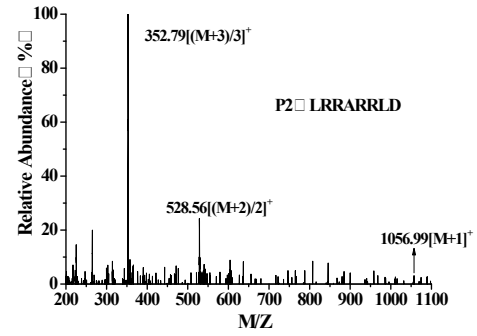
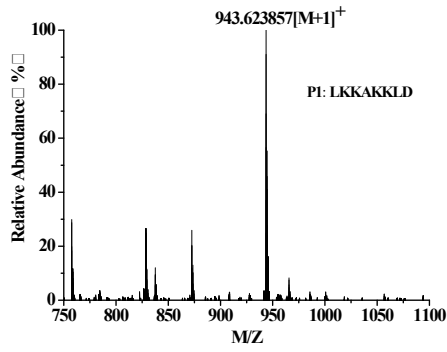
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1. Fatty acids and phospholipid used in the preparation of lipopeptides



Scheme S1. Fatty acids and phospholipid for the preparation of lipopeptides. (a) N-octanoic acid; (b) Lauric acid; (c) Myristic acid; (d) Palmitic acid; (e) LPC.

2. Characterization of MS spectra



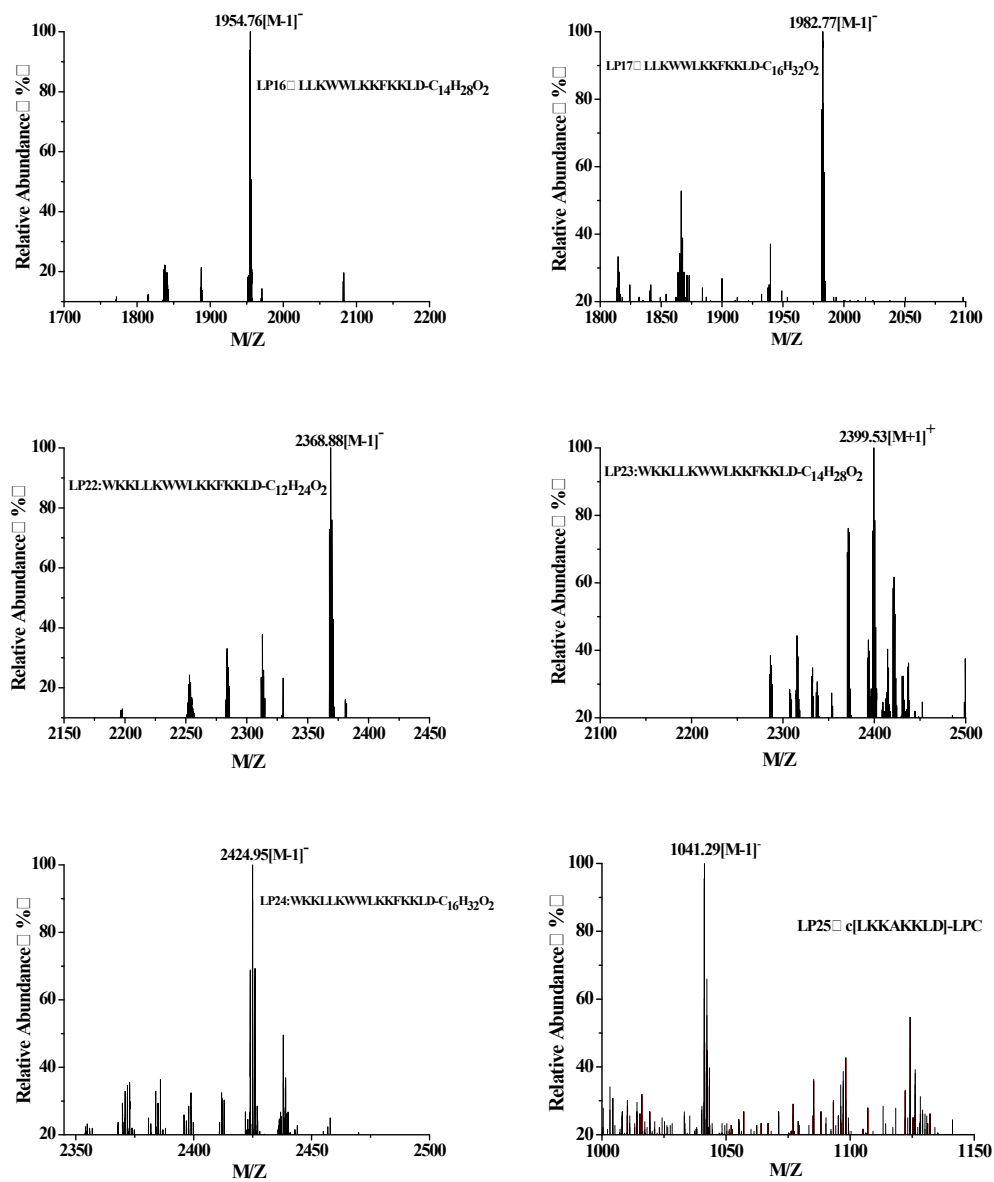


Figure S1. The MS spectra synthesized in the manuscript.

3. Fluorescence spectra of fluorescein and LP21-Fluorescein

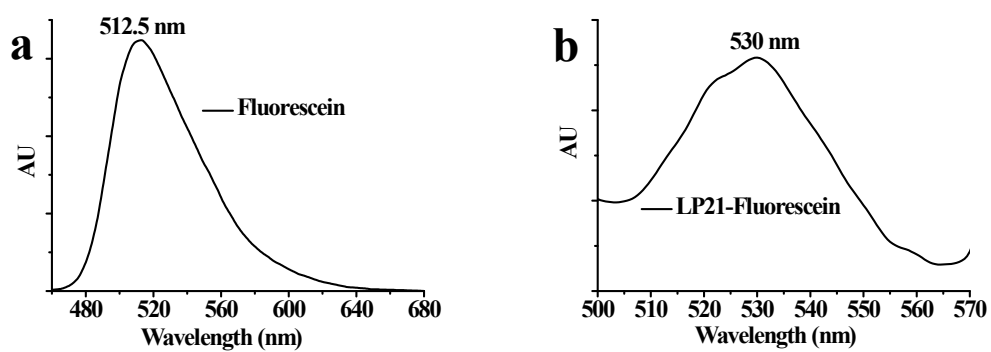


Figure S2. Fluorescence spectra of fluorescein and LP21-Fluorescein.

4. CD spectra

Table S1. CD spectra in 180-260 nm with CDNN

Secondary structure	P7 in water	P7 in SDS solution	LP21 in water	LP21 in SDS solution
Helix	16.4%	18.6%	17.4%	60.6%
Antiparallel	32.2%	44.8%	15.2%	1.9%
Parallel	1.7%	1.9%	1.7%	5.2%
Beta-Turn	23.5%	22.5%	36.1%	29.9%
Rndm. Coil	31.1%	23.7%	37.1%	27.5%
Total Sum	104.9%	111.7%	107.4%	125.2%

5. Hemolysis

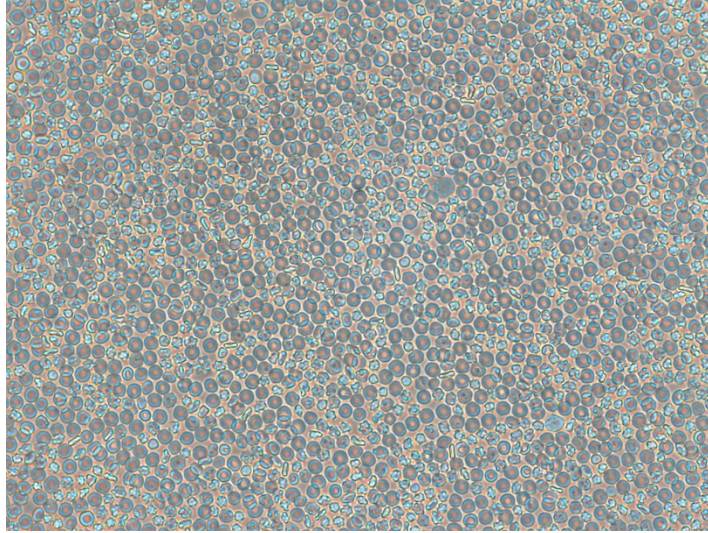


Figure S3. Hemolytic activity of LP21 (10 mg/kg) on mouse red blood cells (400×).

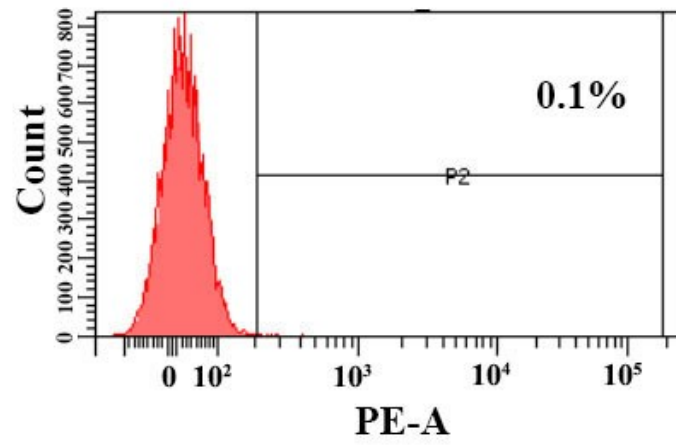


Figure S4. FCM of control group.