Supporting Information

Site-specific Isopeptide Bond Formation: a Powerful Tool for the Generation of Potent and Nontoxic Antimicrobial Peptides

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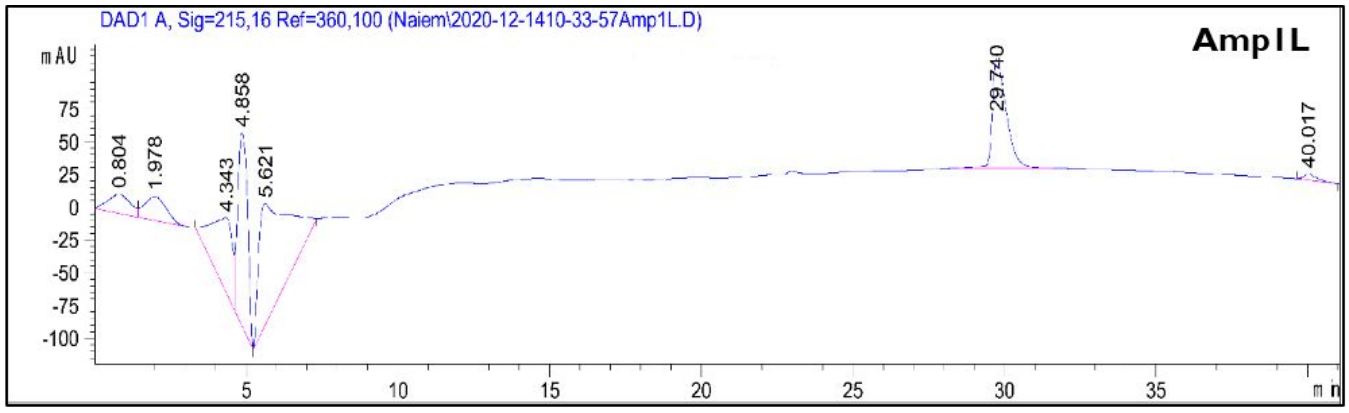
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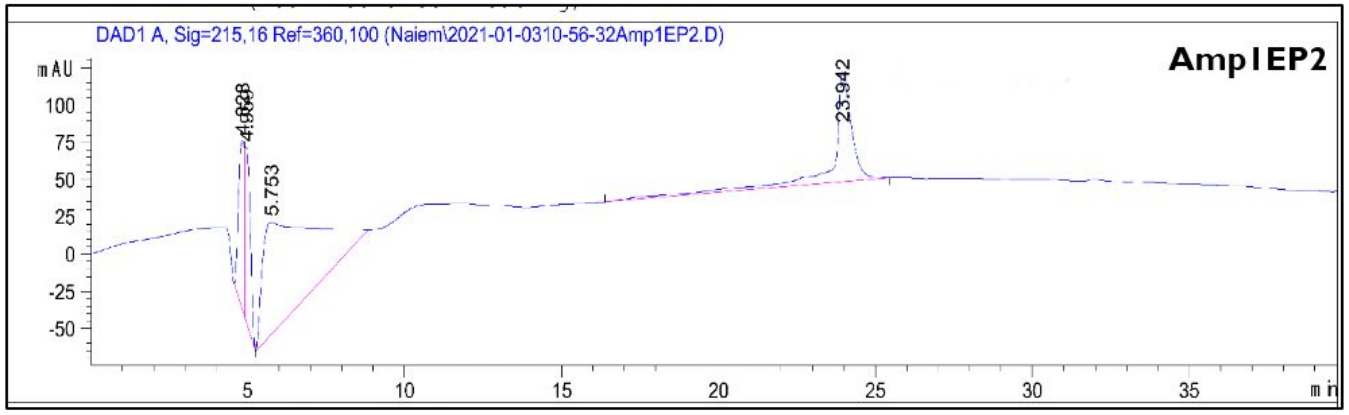
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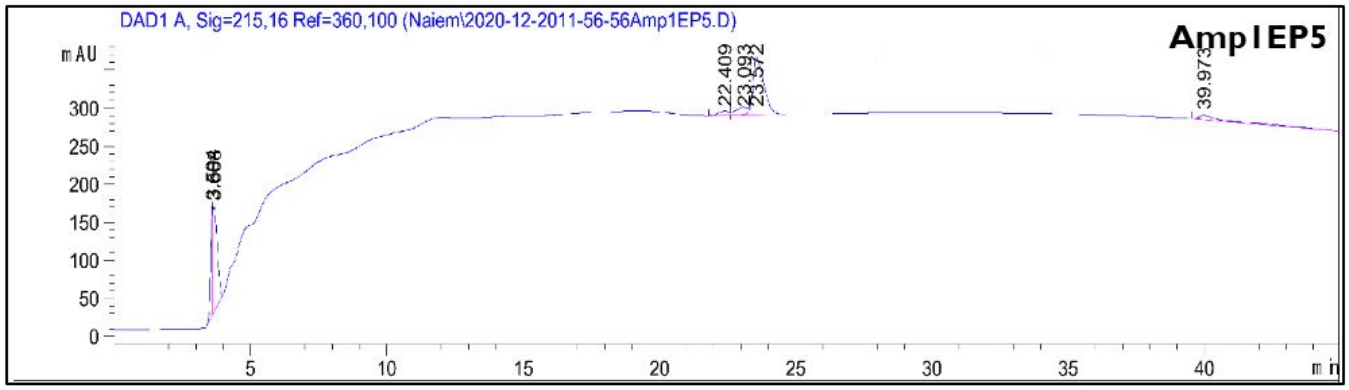
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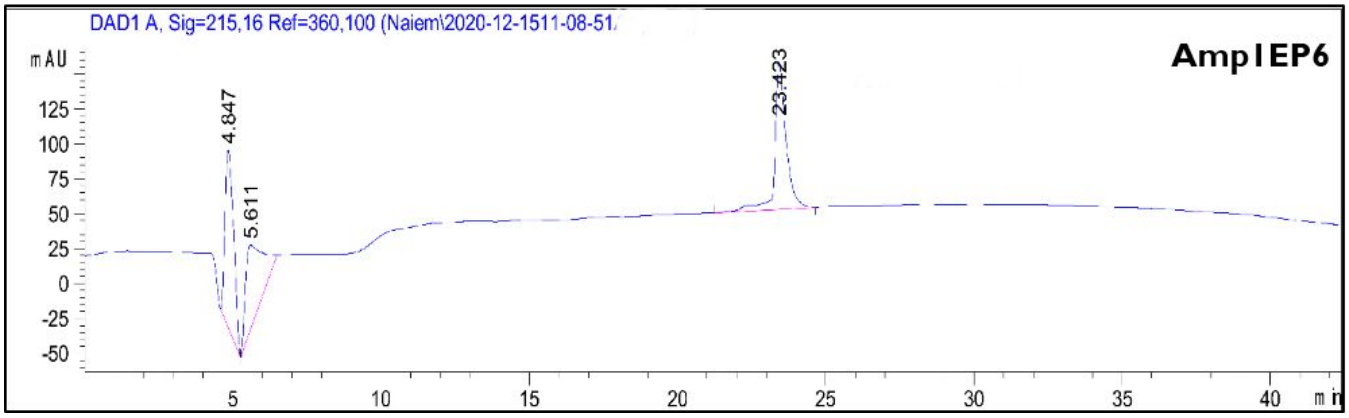
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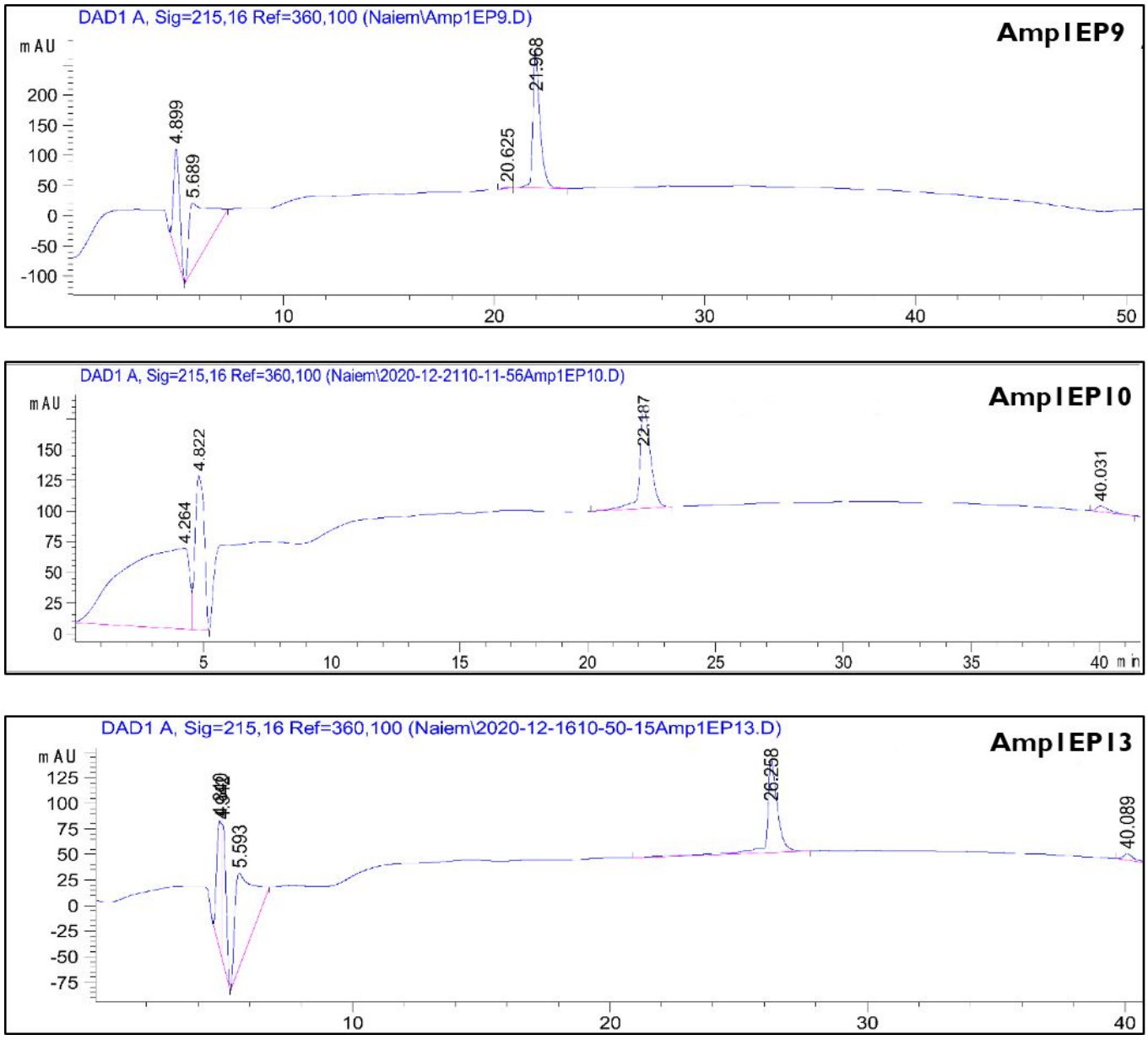


Figure S1: HPLC chromatograms of peptides

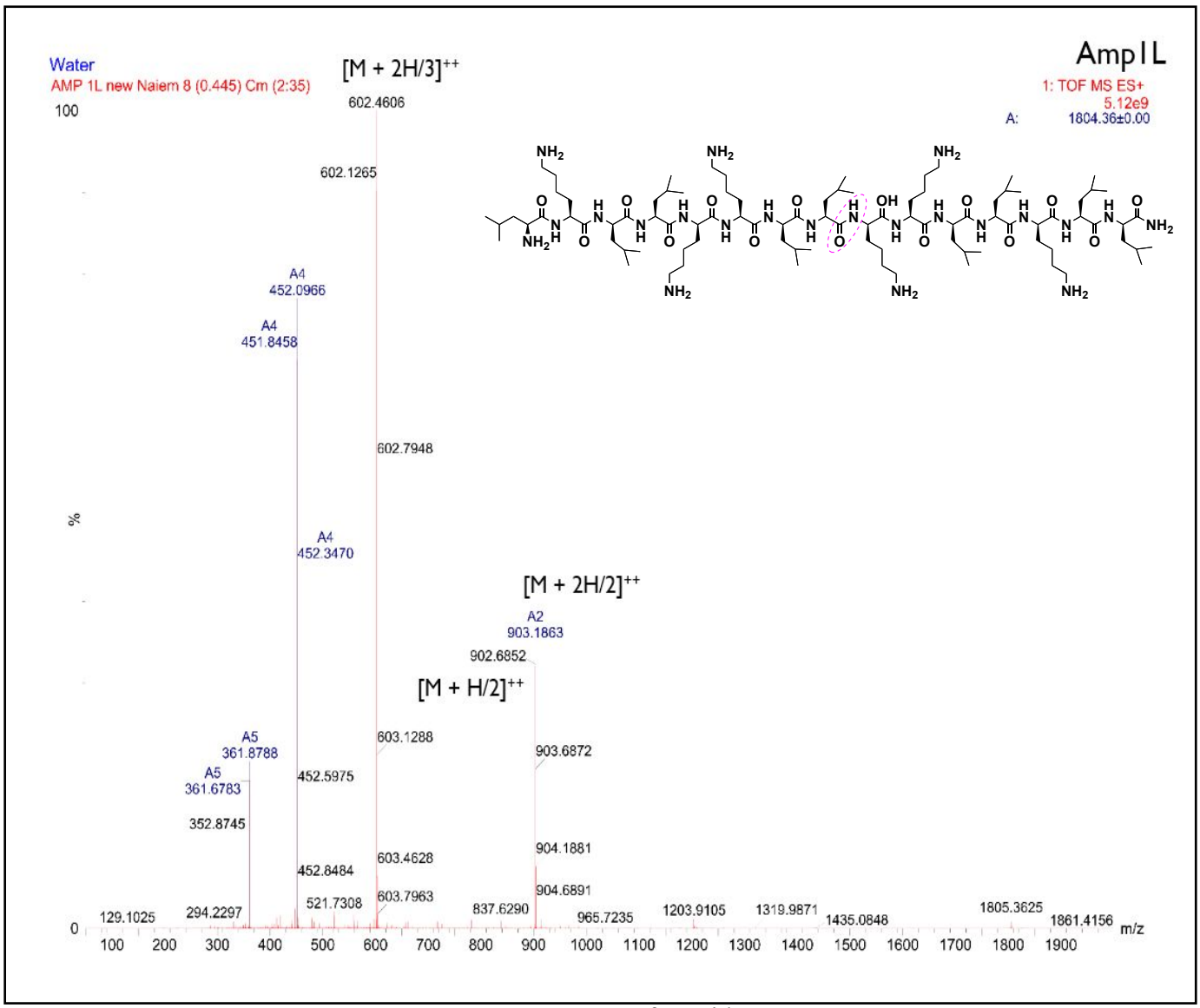


Figure S2: Mass spectra of peptide Amp1L

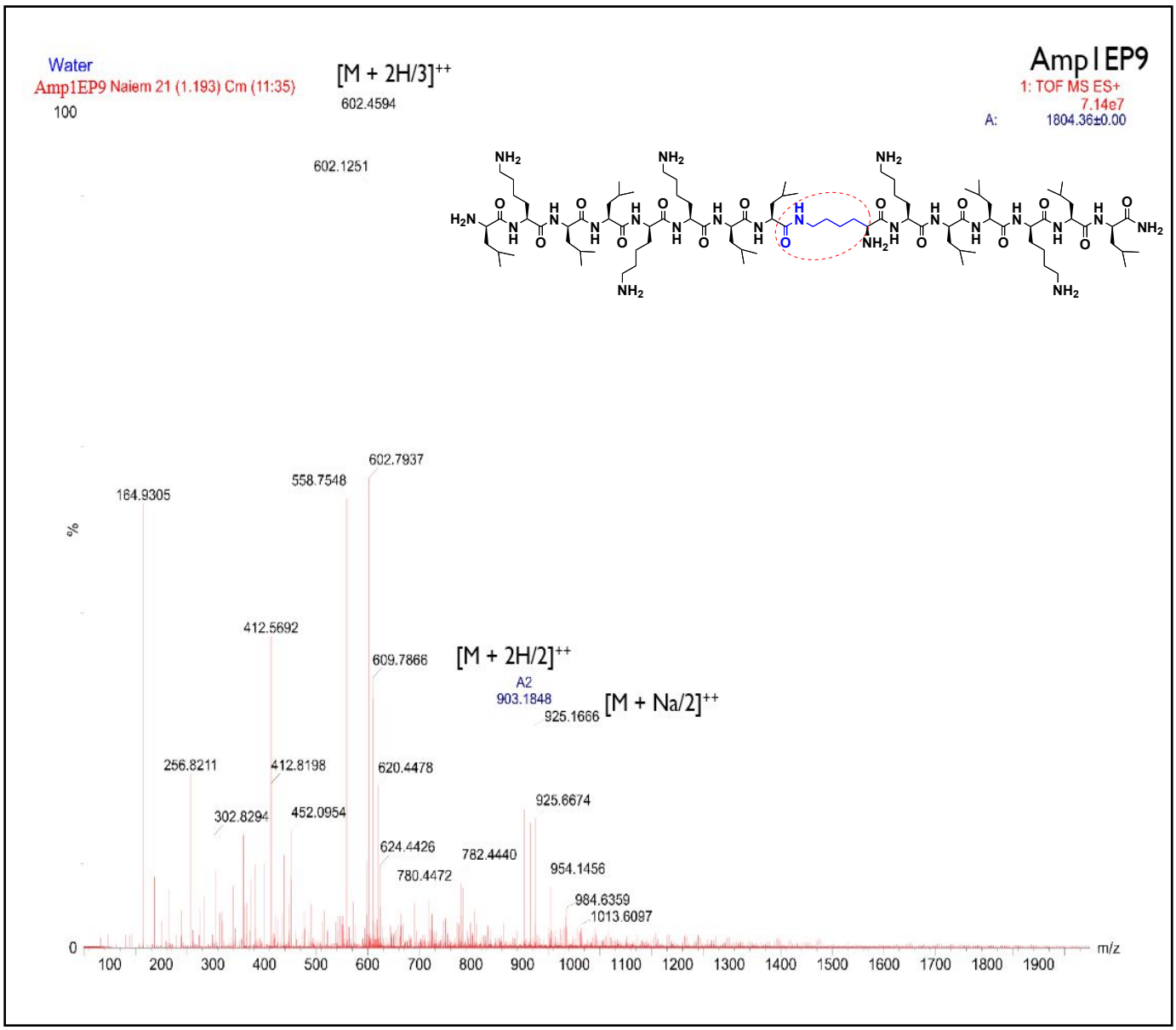
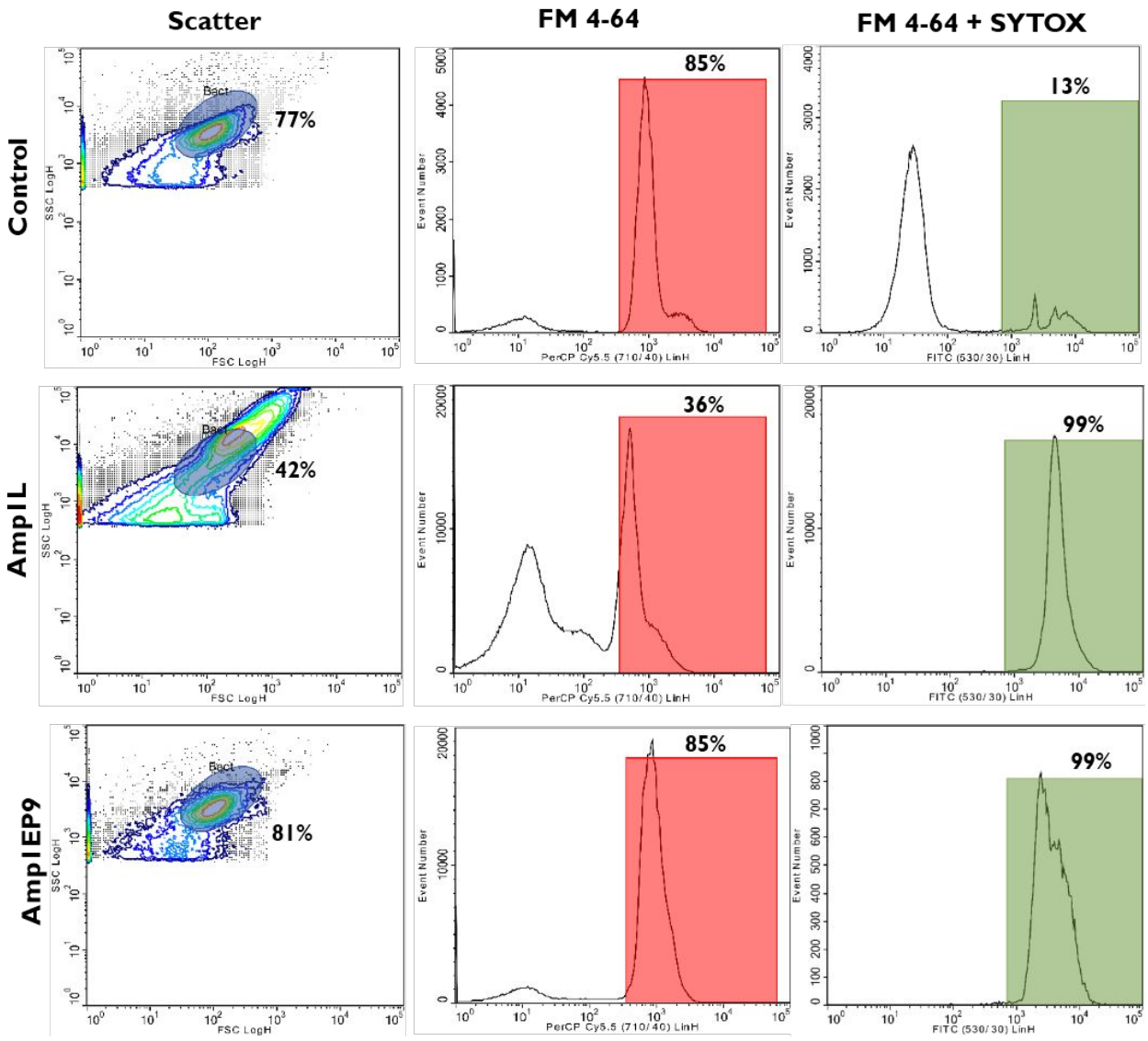
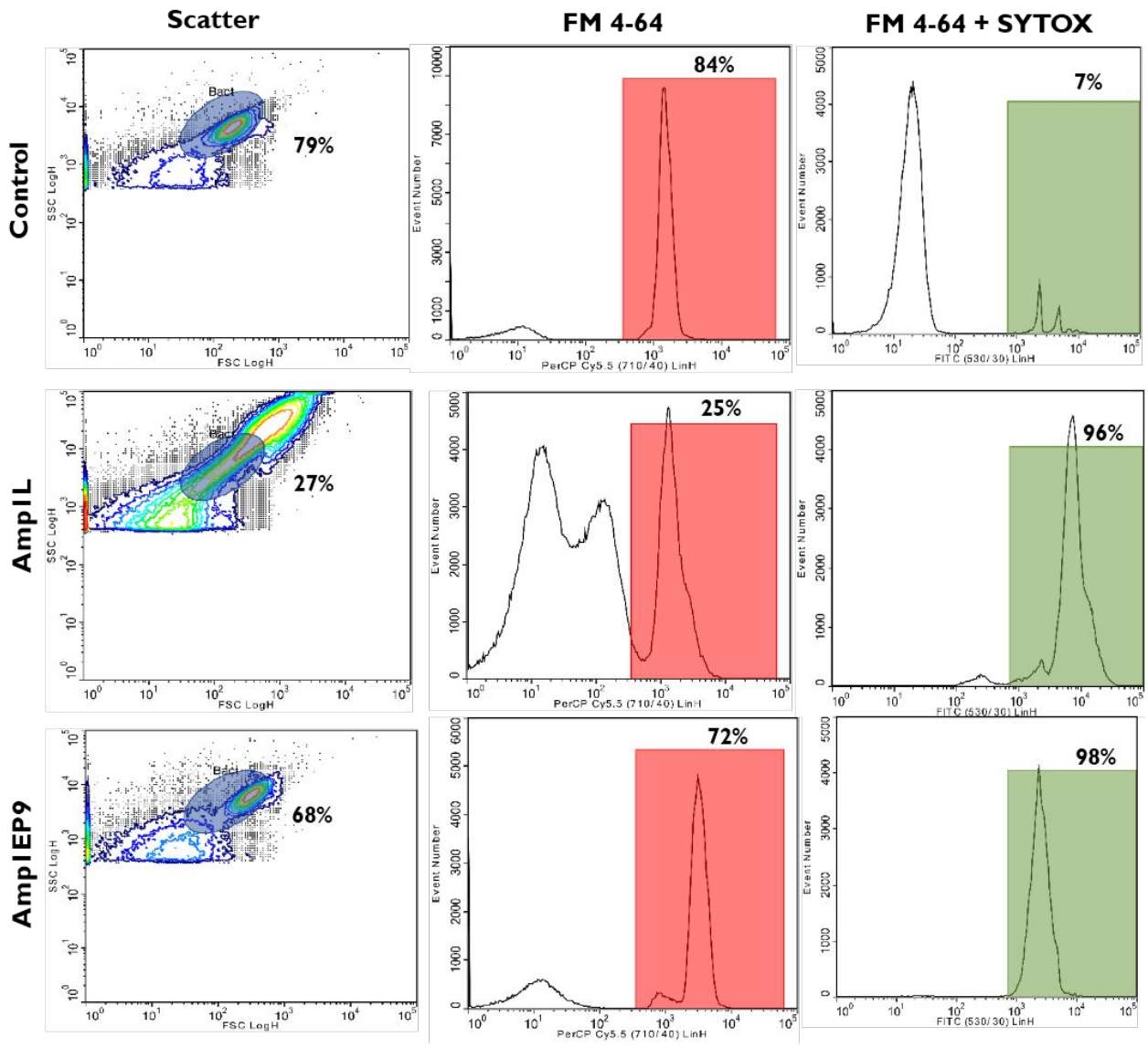


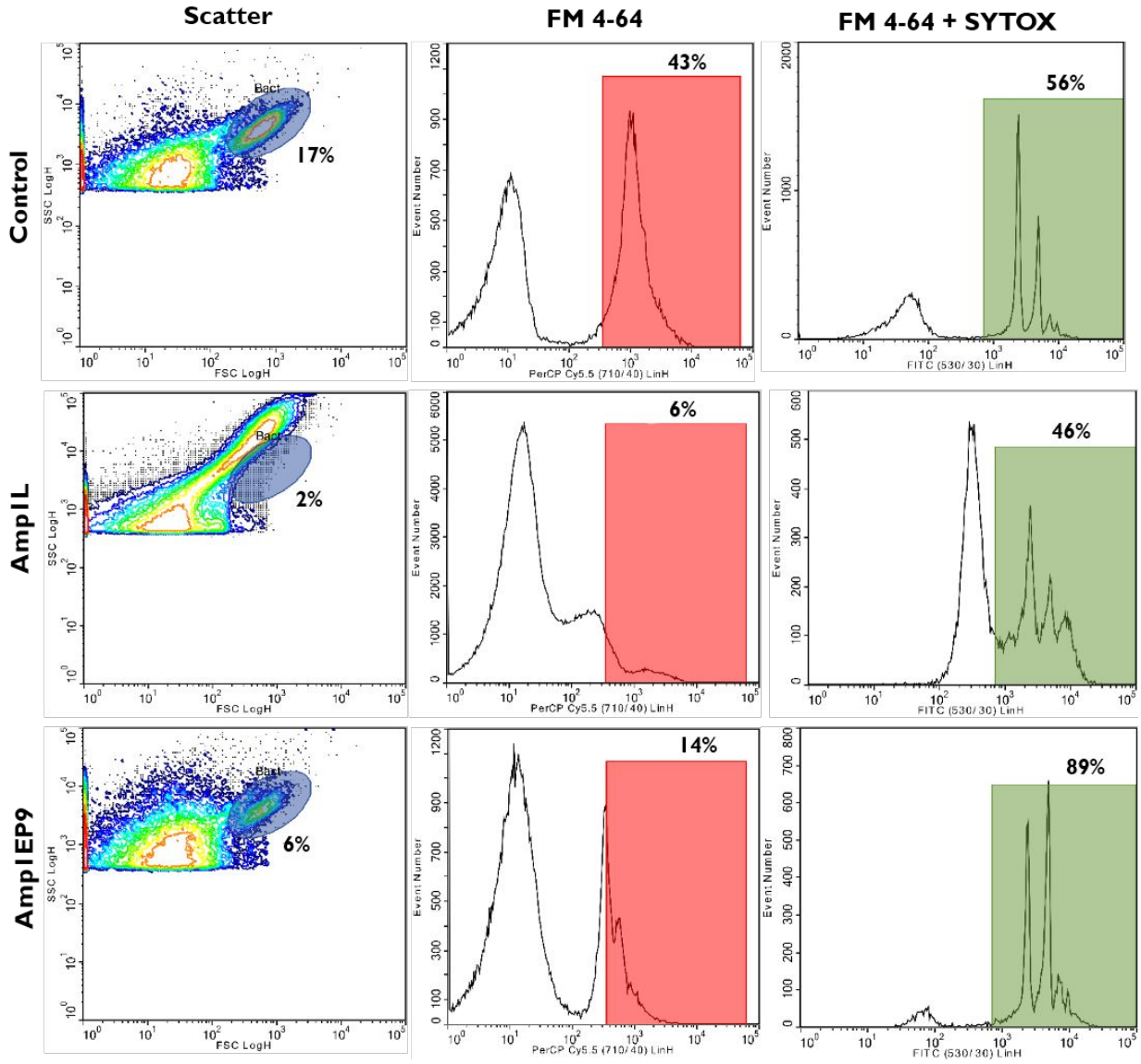
Figure S3: Mass spectra of peptide Amp1EP9

Pseudomonas aeruginosa




E. coli
Scatter
FM 4-64
FM 4-64 + SYTOX
Control
AmpIL
AmpIEP9
Bact
79%
84%
7%
27%
25%
96%
68%
72%
98%
SSC LogH
FSC LogH
Event Number
PerCP Cy5.5 (710/40) LinH
FITC (530/30) LinH

S. aureus


Scatter
FM 4-64
FM 4-64 + SYTOX
Control
AmpIL
AmpIEP9
Bact
17%
43%
56%
2%
6%
46%
6%
14%
89%
SSC LogH
FSC LogH
Event Number
PerCP Cy5.5 (710/40) LinH
FITC (530/30) LinH

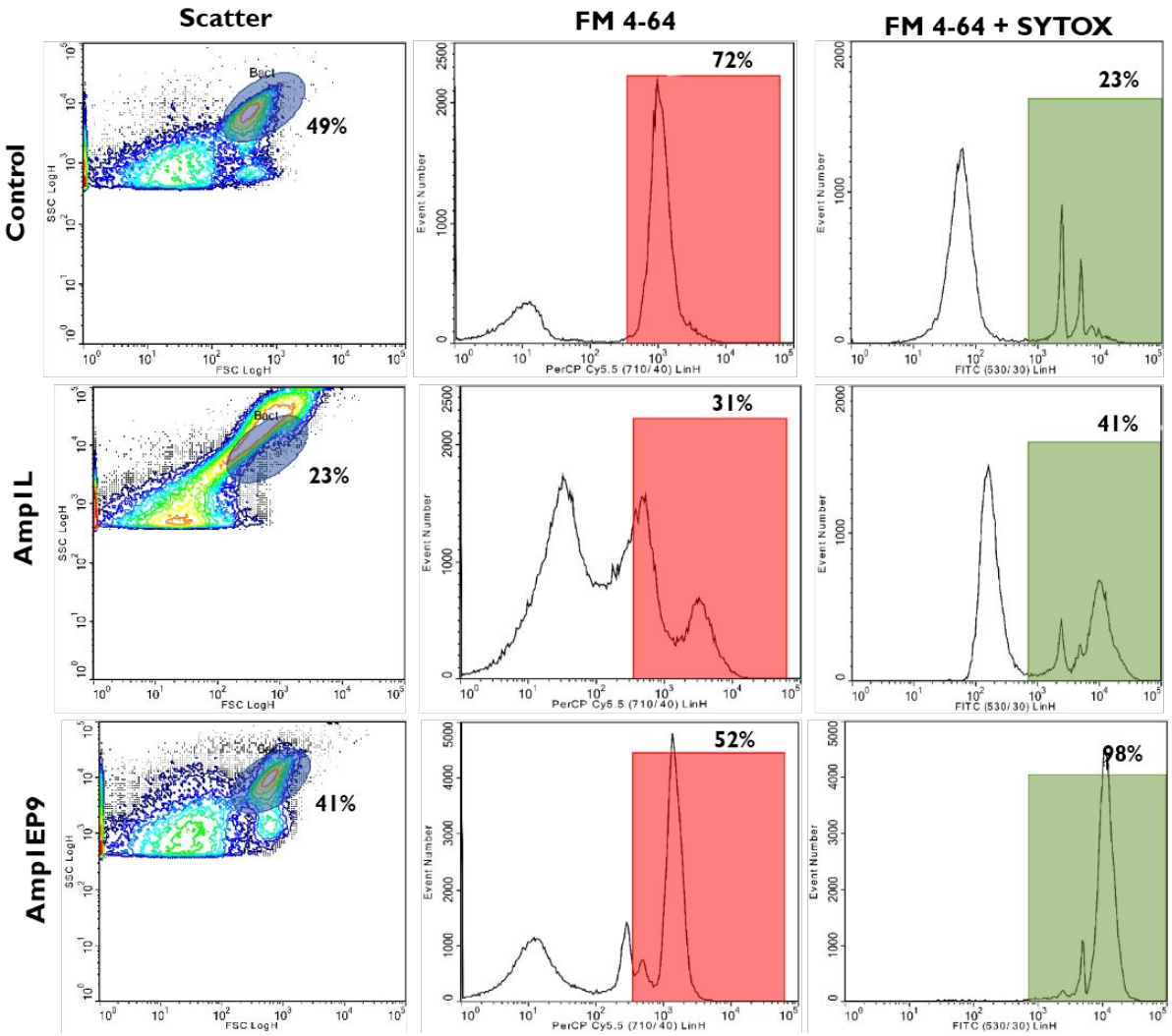


Figure S4: Flow cytometry results of membrane permeability experiments of *P. aeruginosa*, *E.coli*, *S. aureus* and *B. subtilis* treated with peptides Amp1L and Amp1EP9. Side scatter (SCC) vs. forward scatter (FSC) (left column). Note that treatment with Amp1L shift the scattering pattern of the bacteria out of the "Bact" gate (blue oval shape). All bacteria cells should be labeled with the membrane dye FM 4-64 (center column). Cells with compromised membrane are labeled with SYTOX green. Only events that are red positive are considered bacteria and are plotted in the histograms (right column).