

Supplementary materials

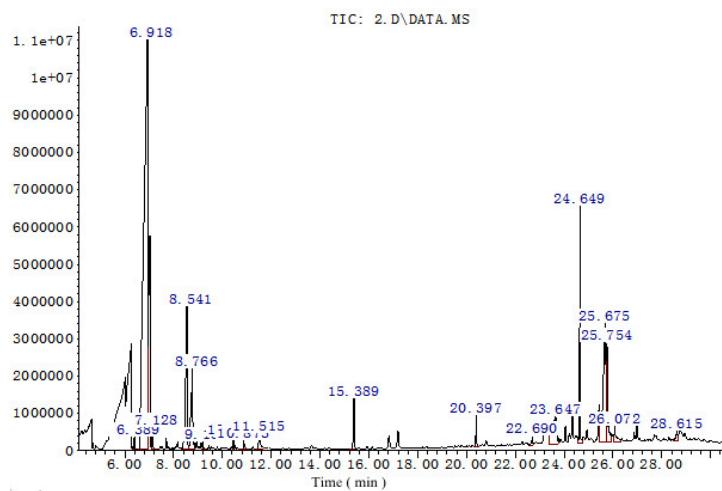


Figure S1. GC-MS analysis of compounds from *Bacillus subtilis* L1-21.

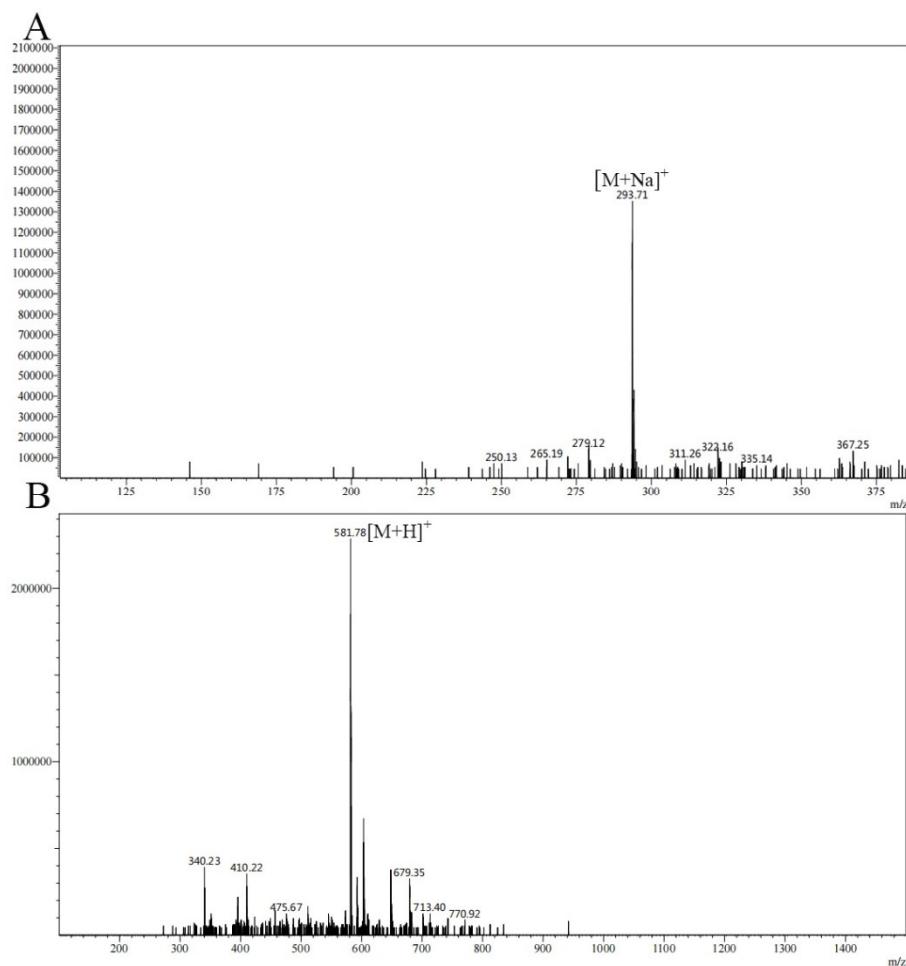


Figure S2. LC-MS (A) Baciysin, $[M+Na]^{+}293.17$, (B) Bacillaene, $[M+H]^{+}581.78$.

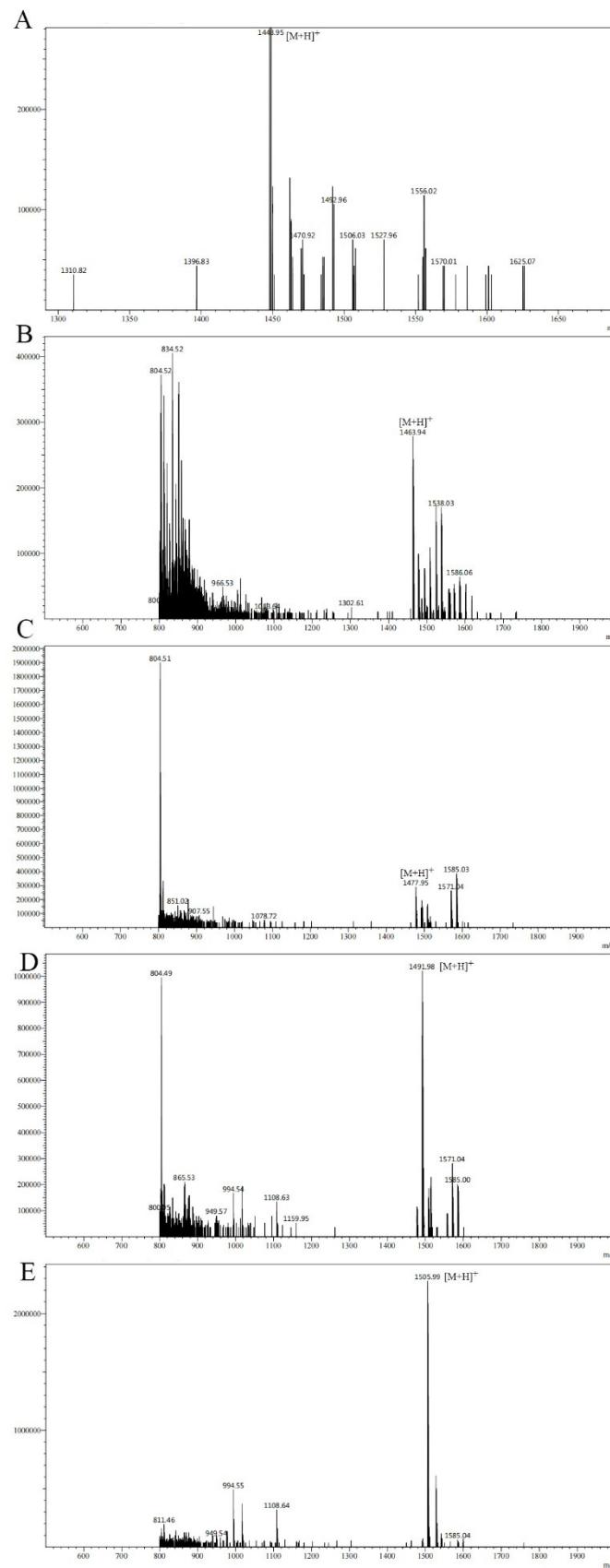


Figure S3. LC-MS fengycin A $[M+H]^+$ +1449.95, B $[M+H]^+$ +1463.97, C $[M+H]^+$ +1477.95, D $[M+H]^+$ +1491.98, E $[M+H]^+$ +1505.99.

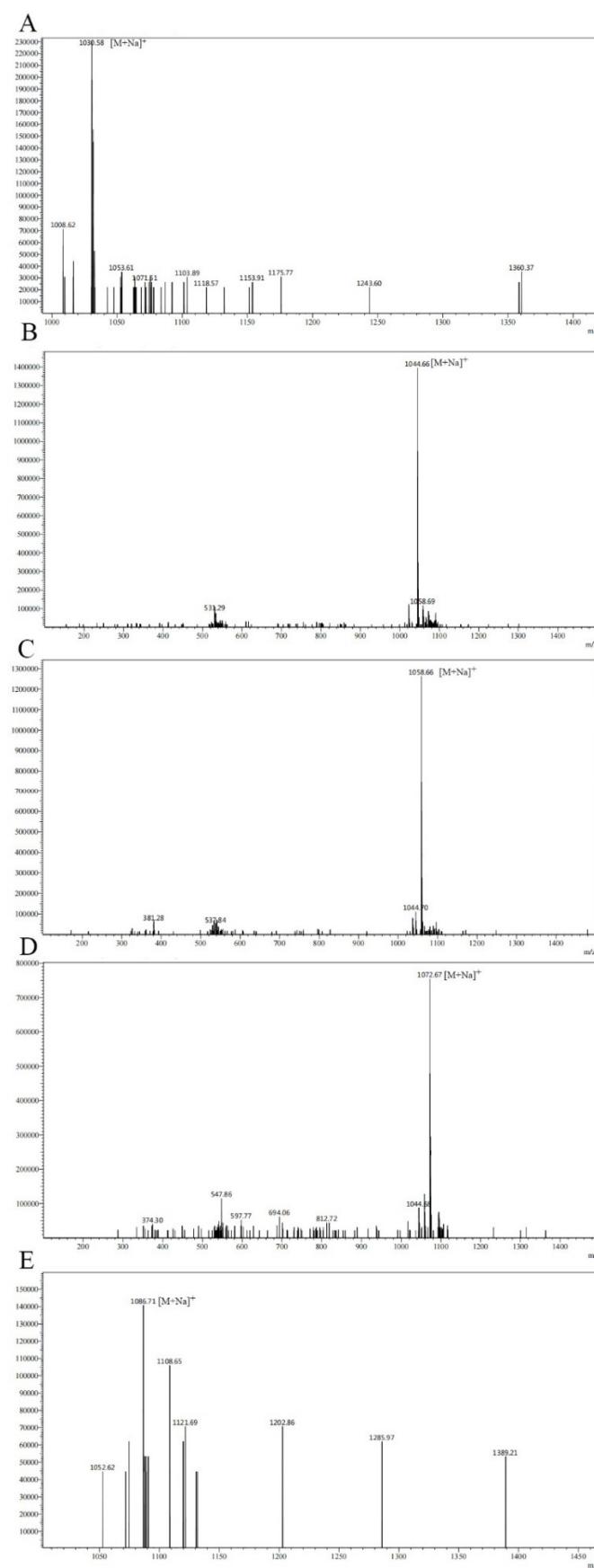


Figure S4. LC-MS Surfactin A $[M+Na]$ +1030.58, B $[M+Na]$ +1044.66, C $[M+Na]$ +1058.66.D $[M+Na]$ +1072.67,E $[M+Na]$ +1086.71.

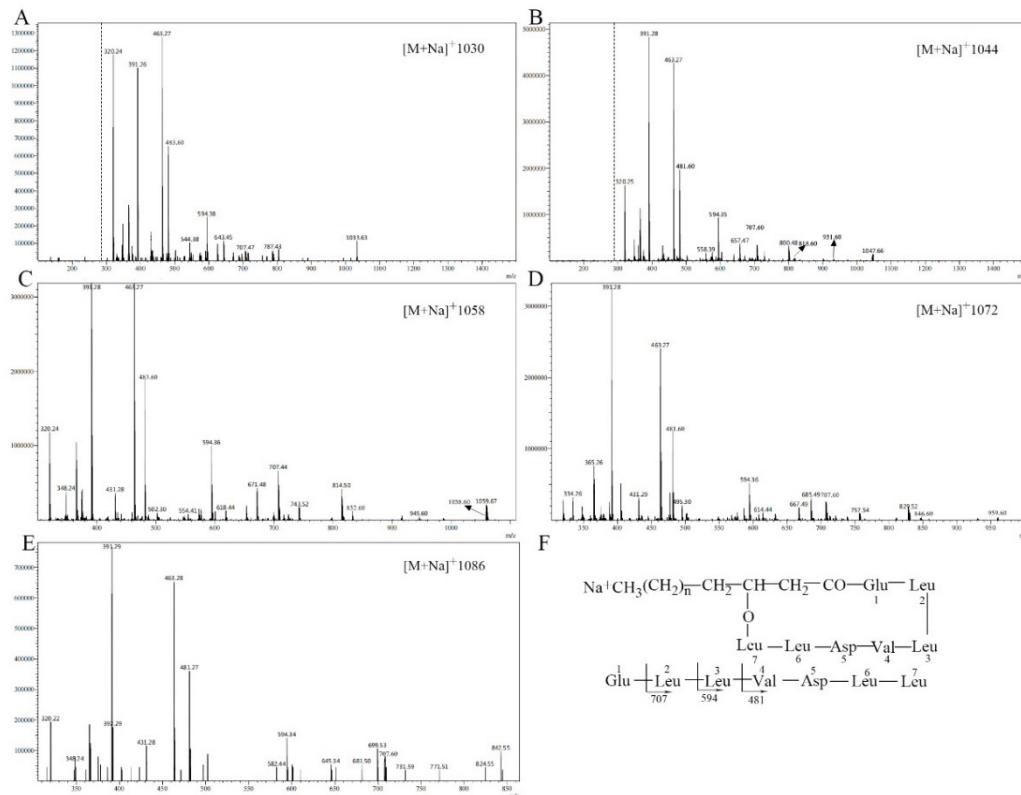


Figure S5. MS/MS Surfactin A $[M+Na]^+$ 1030.58, C₁₃ surfactin A, B $[M+Na]^+$ 1044.66, C₁₄ surfactin A, C $[M+Na]^+$ 1058.66, C₁₅ surfactin A, D $[M+Na]^+$ 1072.67, C₁₆ surfactin A, E $[M+Na]^+$ 1086.71 C₁₇ surfactin A, F The structure of Surfactin A.

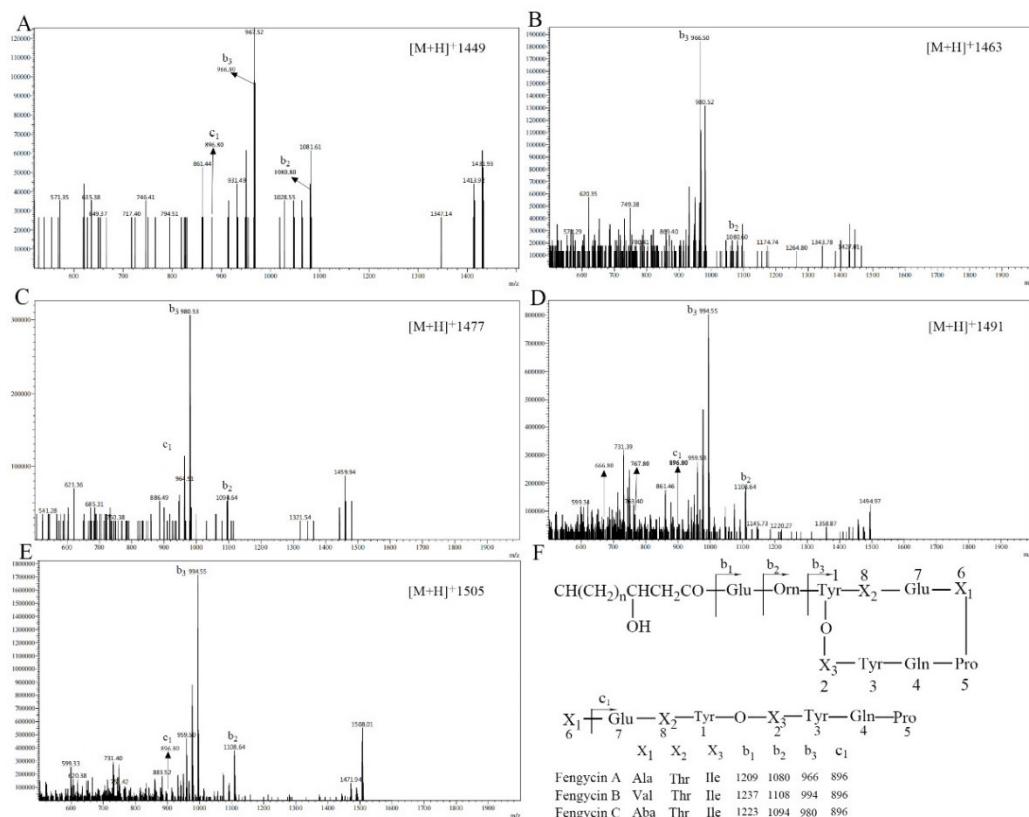


Figure S6. MS/MS fengycin A $[M+H]^+$ 1449.95, C₁₅ fengycin A, B $[M+H]^+$ 1463.97, C₁₆ fengycin A, C $[M+H]^+$ 1477.95, C₁₆ fengycin C, D $[M+H]^+$ 1491.98, C₁₆ fengycin B, E $[M+H]^+$ 1505.99, C₁₇ fengycin B, F The structure of fengycin A, fengycin B, fengycin C.