

Figure S1. Biological *in vitro* study for salinomycin. (A) Chemical structure of salinomycin. (B) MTT dose-response curves in JIMT-1 cells for salinomycin without modification. (C) MTT dose-response curves in MCF-7 cells for salinomycin without modification. (D) Purity characterization by high performance-liquid chromatography and mass spectroscopy for salinomycin without modification. IC<sub>50</sub>, 50% inhibitory concentration.

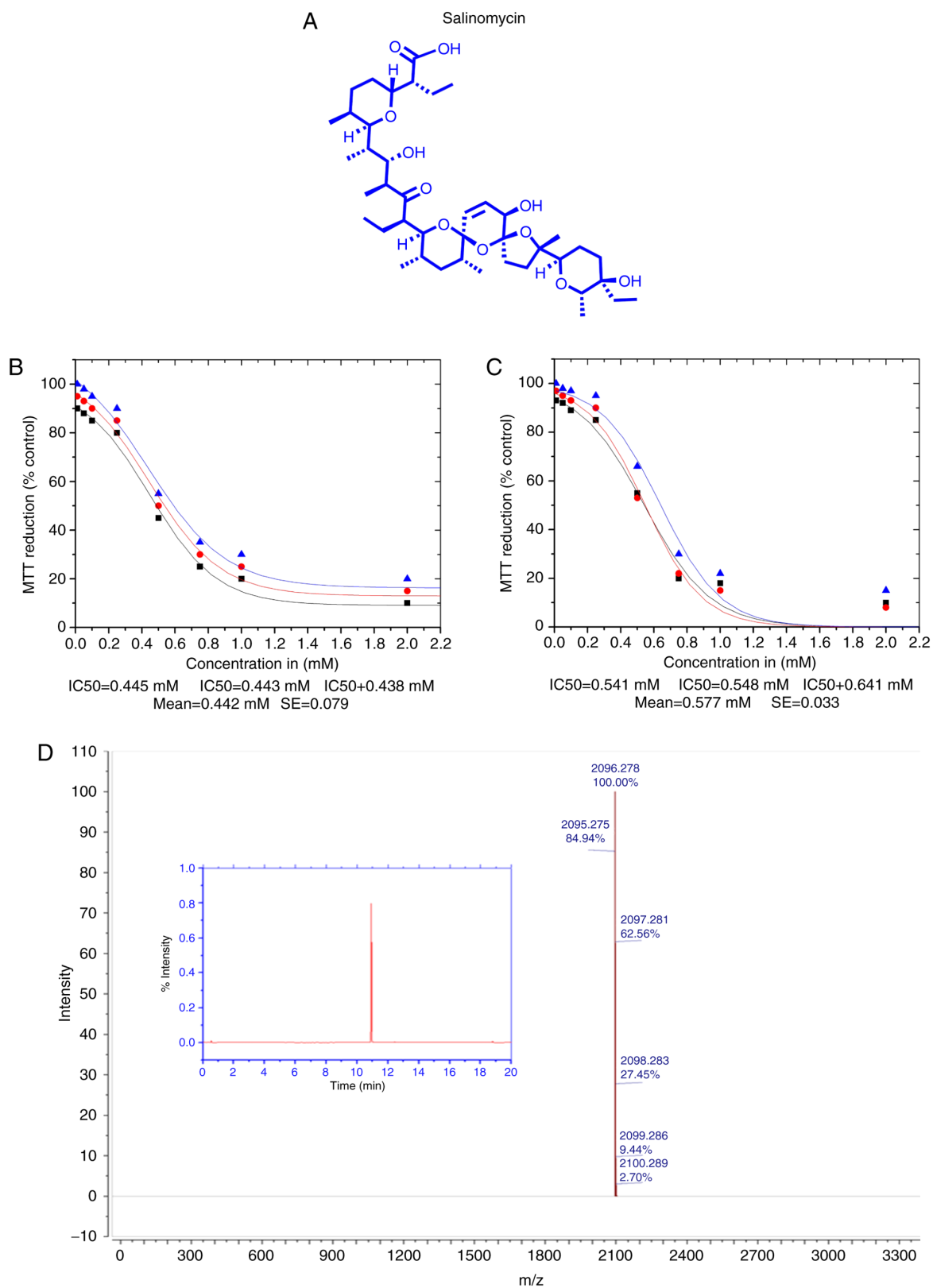


Figure S2. Biological *in vitro* study for peptide 1. (A) Chemical structure of peptide 1. (B) MTT dose-response curves in JIMT-1 cells for peptide 1. (C) MTT dose-response curves in MCF-7 cells for peptide 1. (D) Purity characterization by high performance-liquid chromatography and mass spectroscopy for peptide 1. IC<sub>50</sub>, 50% inhibitory concentration.

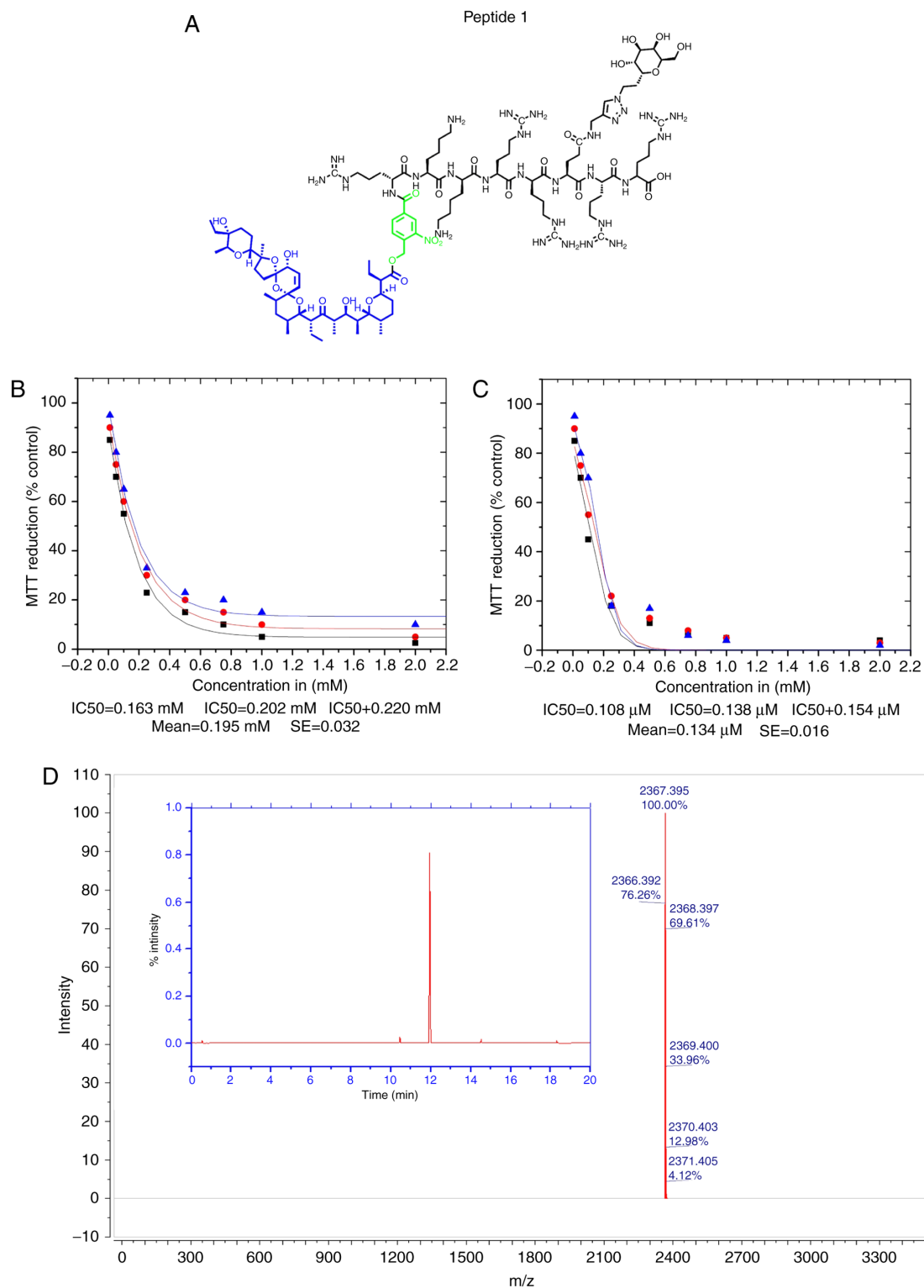


Figure S3. Biological *in vitro* study for peptide 2. (A) Chemical structure of peptide 2. (B) MTT dose-response curves in JIMT-1 cells for peptide 2. (C) MTT dose-response curves in MCF-7 cells for peptide 2. (D) Purity characterization by high performance-liquid chromatography and mass spectroscopy for peptide 2.

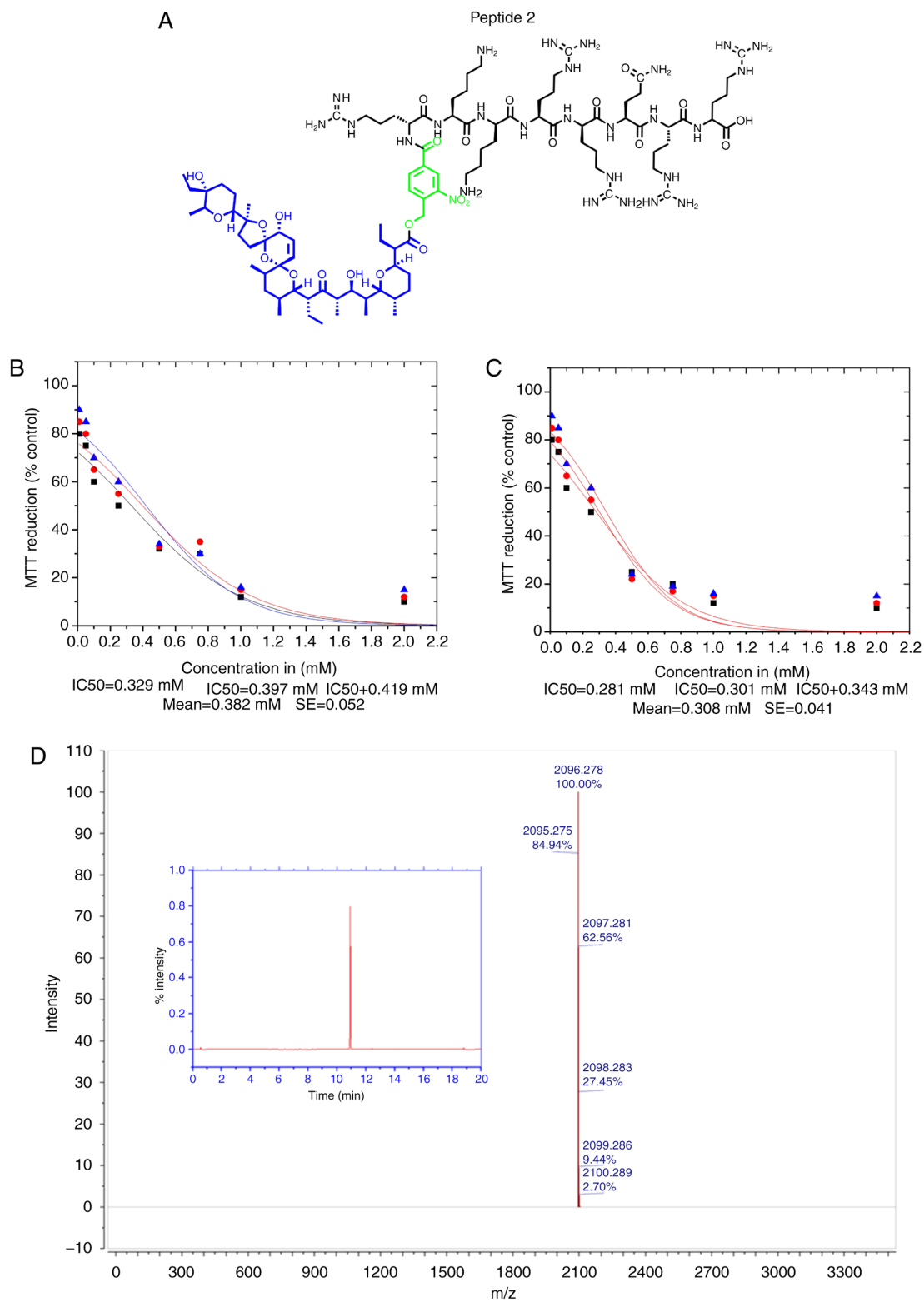


Figure S4. Cell viability analysis. (A) Cell effect of salinomycin (C) Peptide 1 and (E) Peptide 2 on MTT viability, respectively. (B) Cell effect of salinomycin (D) Peptide 1 and (F) Peptide 2 on DEP cell death, respectively. DEP, dielectrophoretic.

