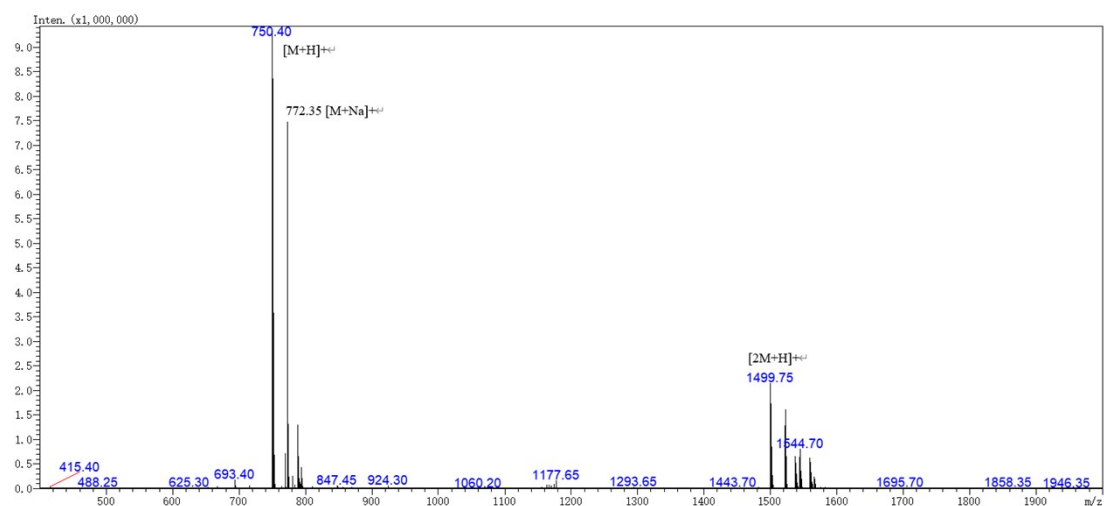
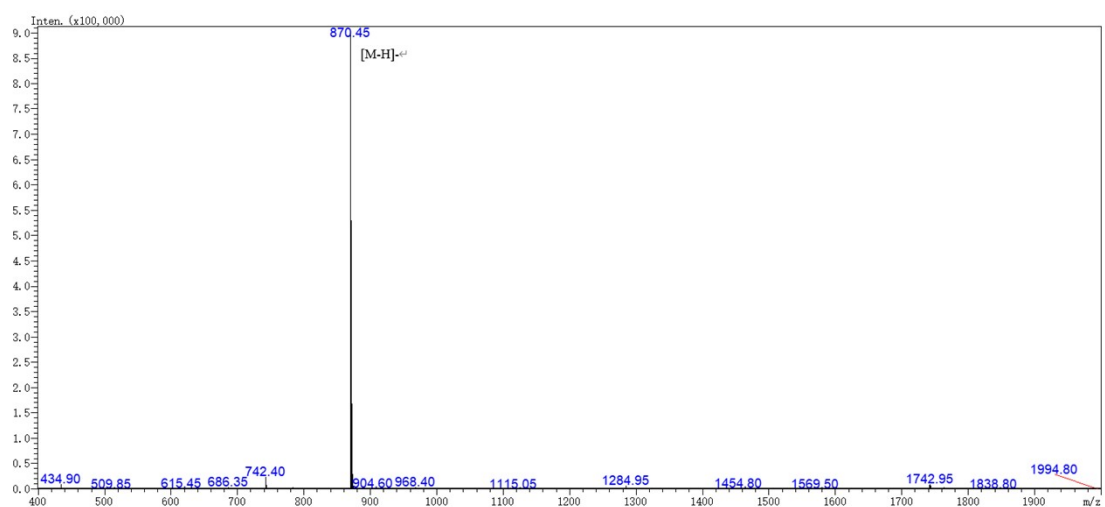


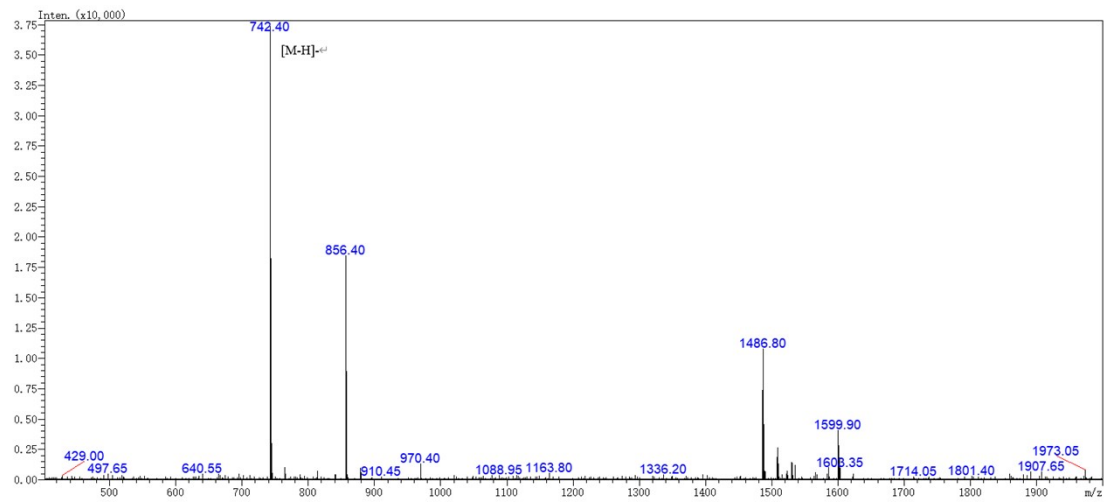
(A) QDPLFPL



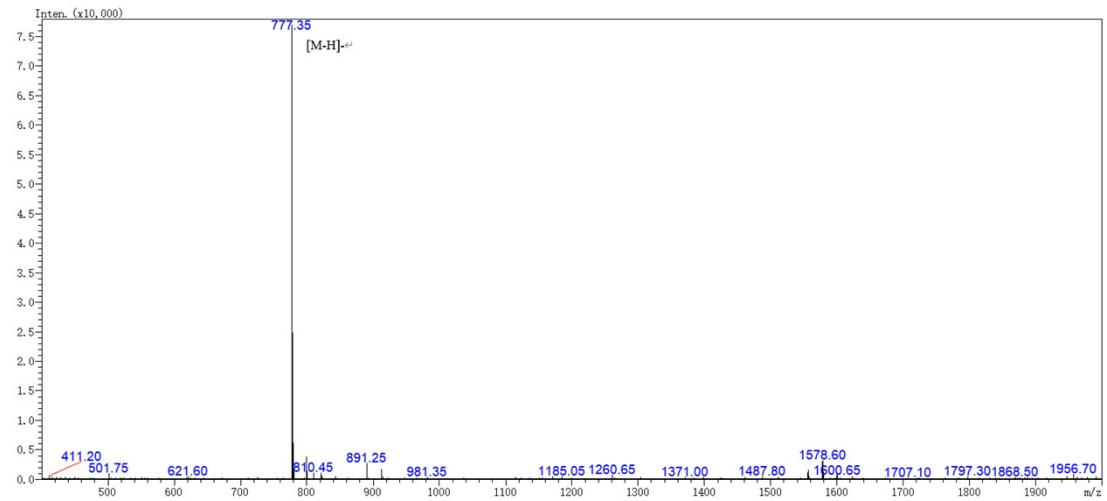
(B) FPGVSPF



(C) SPAQLLPF

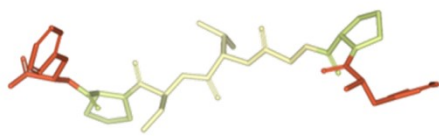


(D) LVPYRP

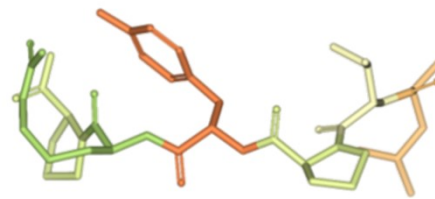


(E) WYWPQ

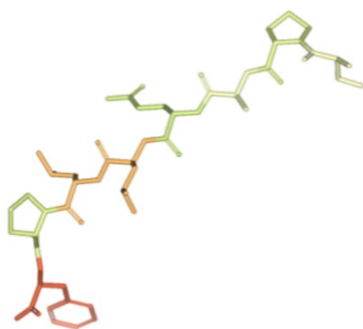
Figure S1 Mass spectra of QDPLFPL (A), FPGVSPF (B), SPAQLLPF (C), LVPYRP (D) and WYWPQ (E) characterized by LC-MS/MS.



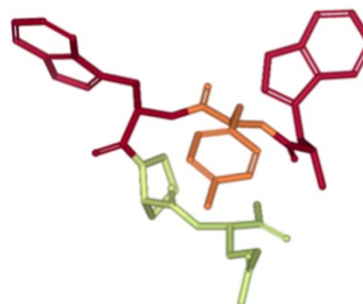
FPGVSPF



LVPYRP



SPAQLLPF



WYWPQ

Figure S2 Structure of four ACE inhibitory peptides prepared by PyMOL software.

Table S1 ACE residues in coordination with Zn²⁺ and in the S₁, S₁' and S₂ pockets interacting with LVPYRP and WYWPQ.

| ACE region | ACE key residue | LVPYRP | WYWPQ |
|-------------------------|-----------------|--------|-------|
| Zinc ligand | His383 | √ | - |
| | His387 | √ | - |
| | Glu411 | √ | √ |
| S ₁ pocket | Ala354 | √ | - |
| | Glu384 | √ | - |
| | Tyr523 | √ | - |
| S ₁ ' pocket | Glu162 | √ | - |
| S ₂ pocket | Gln281 | √ | - |
| | His353 | √ | - |
| | Lys511 | - | - |
| | His513 | √ | - |
| | Tyr520 | √ | - |