

Supplementary Materials

Figure S1. HPLC conditions for *Chlorella* 11-peptide are described. Column: 4.6×250 mm, Venusil XBP-C18. An elution system consisted with two solvents: (a) 0.1% trifluoroacetic acid in 100% acetonitrile and (b) 0.1% trifluoroacetic acid in 100% water. A mixture of 18% solvent (a) and 82% solvent (b) was applied to the column with a flow rate of 1.0 mL/min. The retention time of the peptide appeared at 12.6 min with absorption monitored at 220 nm.

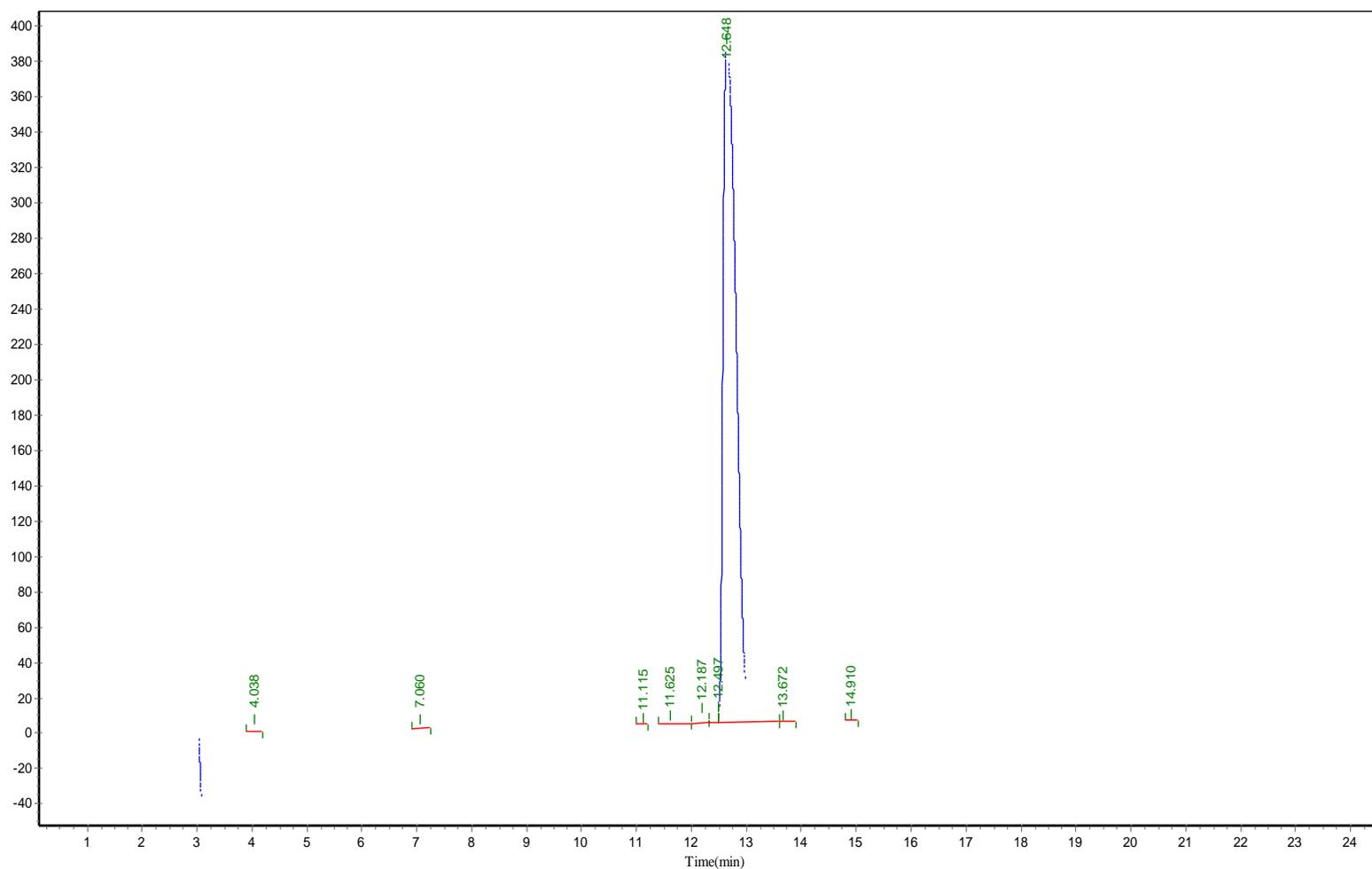


Figure S2. For the MS experiment using a Q-TOF mass spectrometer, typical source parameters were capillary voltages of 3 kV and cone voltages of 50 V, MS experiments were performed in the collision cell of the instrument and argon was used as a collision gas, a representative spectrum shows a signal of [*Chlorella*-11 peptide + H]⁺ at m/z 1310 as depicted below.

28-Jan-2013

14:05:20

11-peptide P130123-MJ110959 MW:1309.47

130128-VF-11 10 (0.518)

Probe: ESI

Cone: 50v

Desolvation Temp: 350

Capillary:3.00KV

Extractor: 5v

Gas Flow: 350

Scan ES+

5.45e6

