

Supplementary Materials

<i>Regression Parameters</i>	
Multiple correlation coefficient	0.9999
Coefficient of determination R^2	0.9998
LOD (mg/g)	0.004
LOQ (mg/g)	0.012
Working range	0.017 – 0.889 mg/g

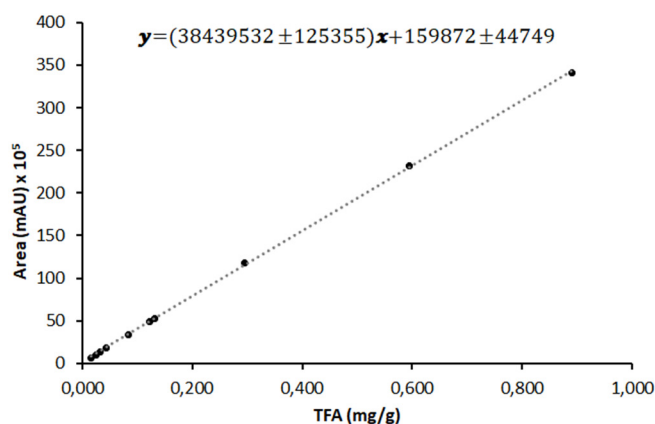


Figure S1. Calibration curve of trifluoroacetate ion. (left) regression parameters obtained by fitting the data to normal least squares regression. (right) Calibration curve TFA (mg/g) vs Peak area.

<i>Estadísticas de la regresión</i>	
Multiple correlation coefficient	1.0000
Coefficient of determination R^2	1.0000
LOD (mg/g)	0.007
LOQ (mg/g)	0.022
Working range	0.022 – 3.940 mg/g

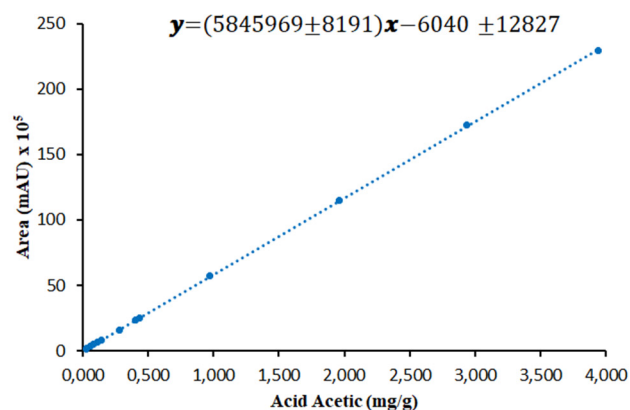


Figure S2. Calibration curve of acid acetic. (left) regression parameters obtained by fitting the data to normal least squares regression. (right) Calibration curve Acid Acetic (mg/g) vs Peak area.

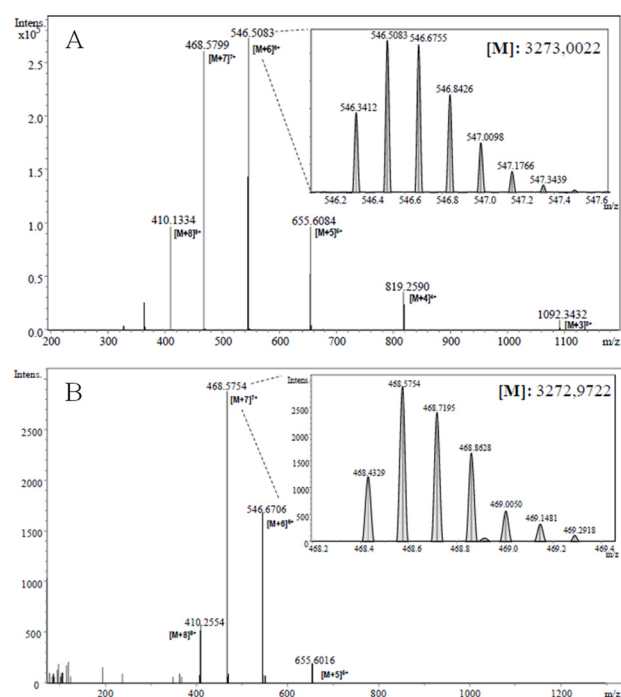


Figure S3. Mass spectra of peptides 1-TFA (A) and 1-HCl (B). The multi-charged species and the broadening of the isotopic distribution are observed. From the m/z value of the first peak of the isotopic distribution, the experimental mass of the peptide was determined.

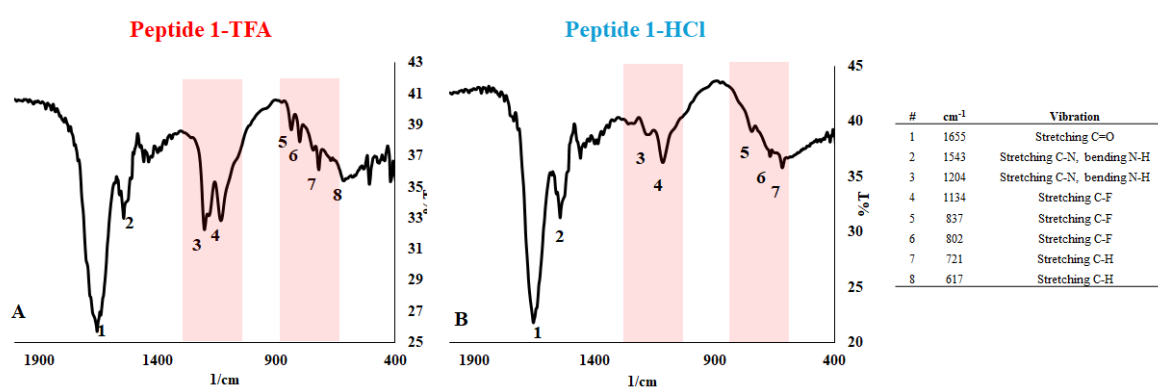


Figure S4. ATR spectra of peptides 1-TFA and 1-HCl. The pink stripes show the signals that are attributed to TFA.

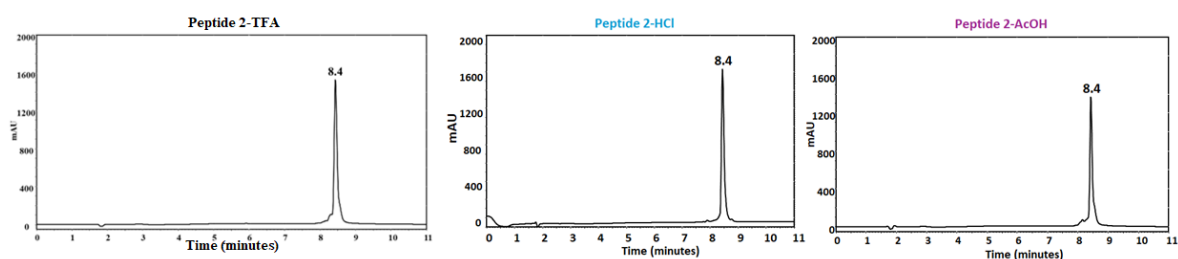


Figure S5. Chromatographic profiles of peptides 2-TFA, 2-HCl and 2-AcOH. Chromatographic system: Chromolith® C-18 monolithic column (10×4.6 mm), solvent A: H₂O-TFA 0.05% and solvent B: ACN-TFA 0.05%, elution gradient: 10/10/50/100/100/100/10/10 %B in 0/1/9/9.1/12/12.1/15 min, flow rate 1.0 mL/min, injection volume 10 μL (1 mg/mL) and 210 nm for detection.

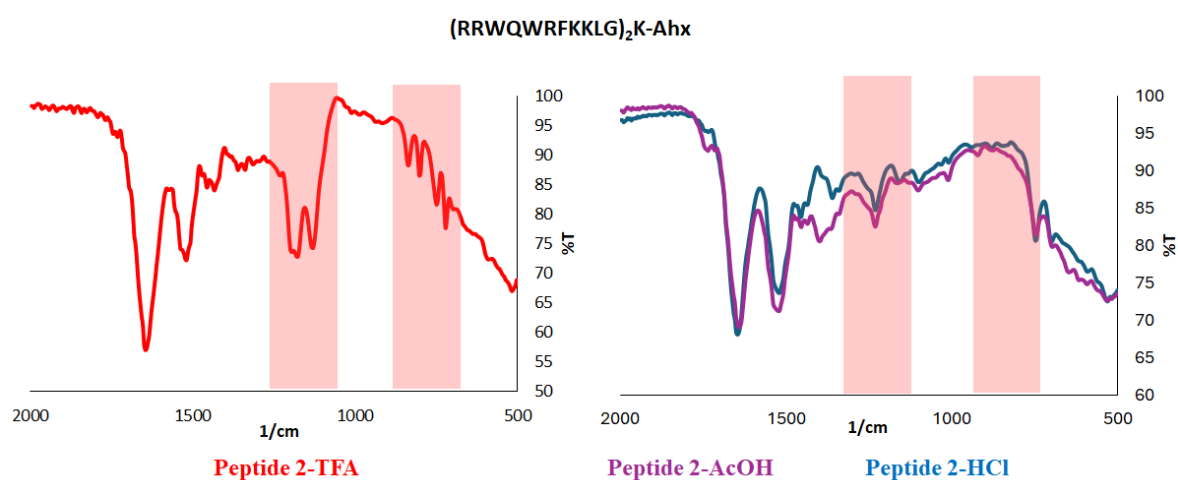


Figure S6. ATR spectra of peptides 2-TFA, 2-HCl and 2- AcOH. The pink stripes show the signals that are attributed to TFA.

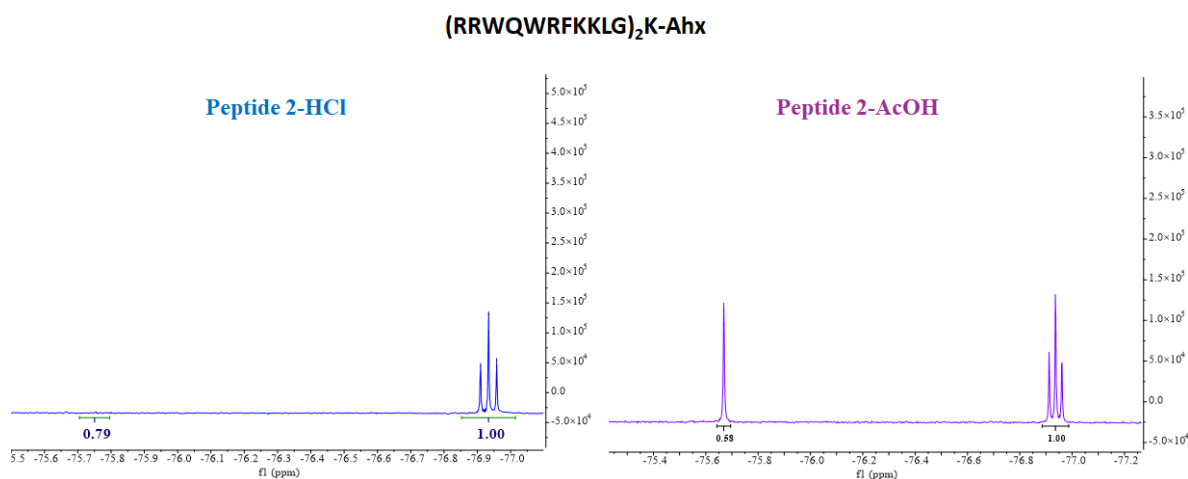


Figure S7. ¹⁹F-NMR spectra of peptide 2-HCl and 2-AcOH, using as reference standard trifluoroethanol (TFE). The chemical shift of TFA is -75.76 ppm (s) and of TFE -76.97 ppm (t).

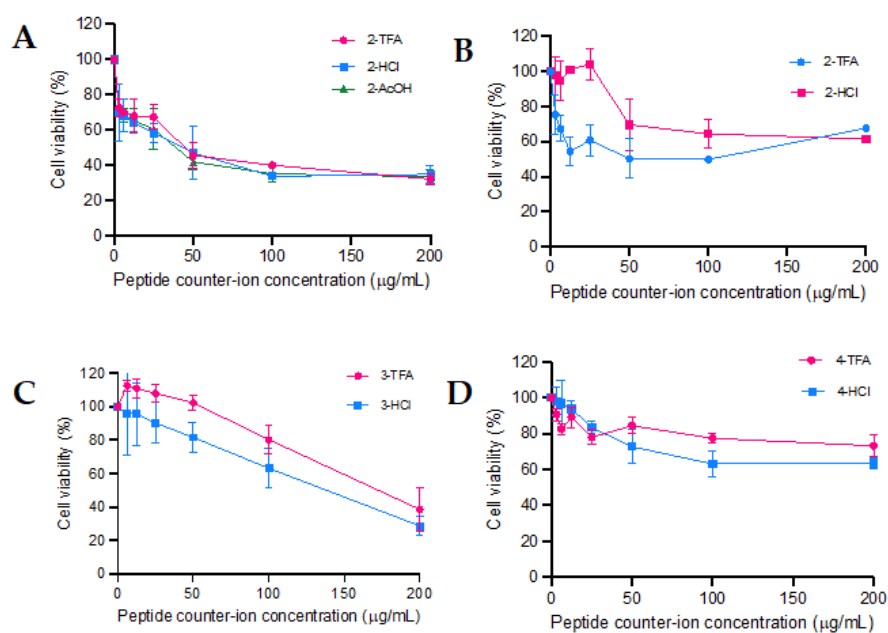


Figure S8. Cytotoxic effect of (A) Peptide-2 against A375 cell line, (B) Peptide-2 against B16-F10 cell line, (C) Peptide-3 against Hela cell line, D. Peptide-4 against A375 cell line. The cells were treated with peptides for 2 h at 37 °C. The data represent the mean $\pm$ SD (n = 3). 2-way ANOVA and t-test were used, $p \leq 0.05$, showing (A) statistically not significant differences between 1-TFA, 1-HCl and 1-Act peptides, (B) statistically not significant differences between 2-TFA and 2-HCl peptides, (C) statistically not significant differences between 3-TFA and 3-HCl peptides, (D) statistically not significant differences between 4-TFA and 4-HCl peptides.