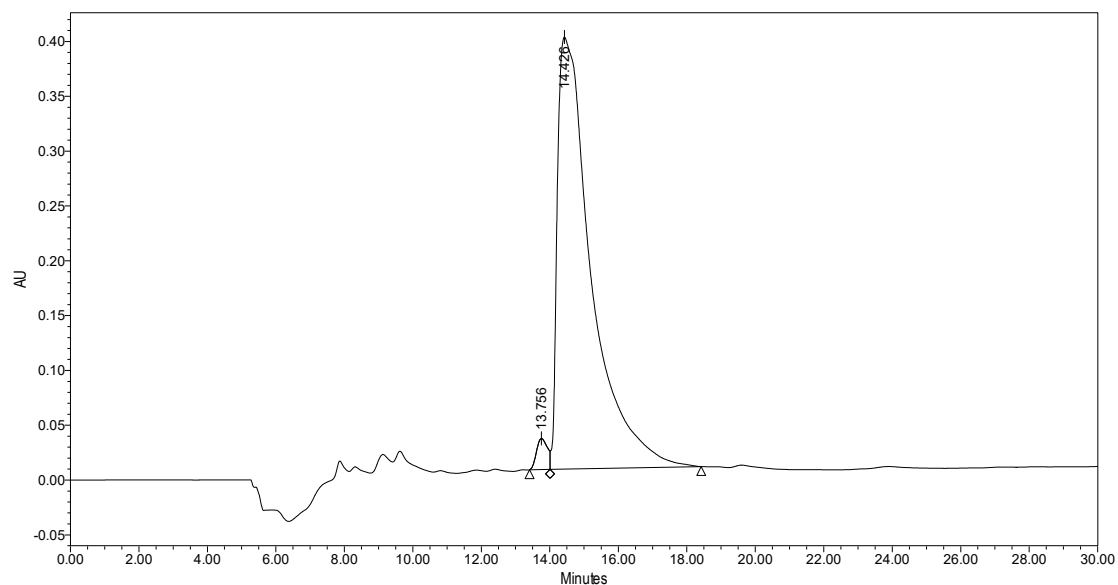
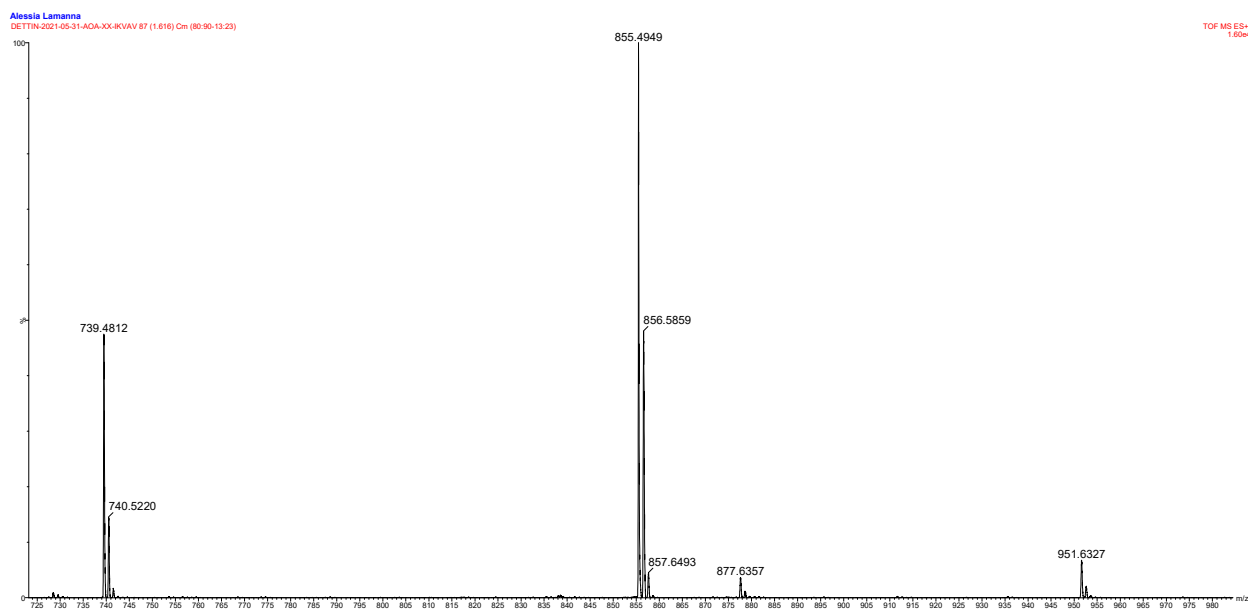


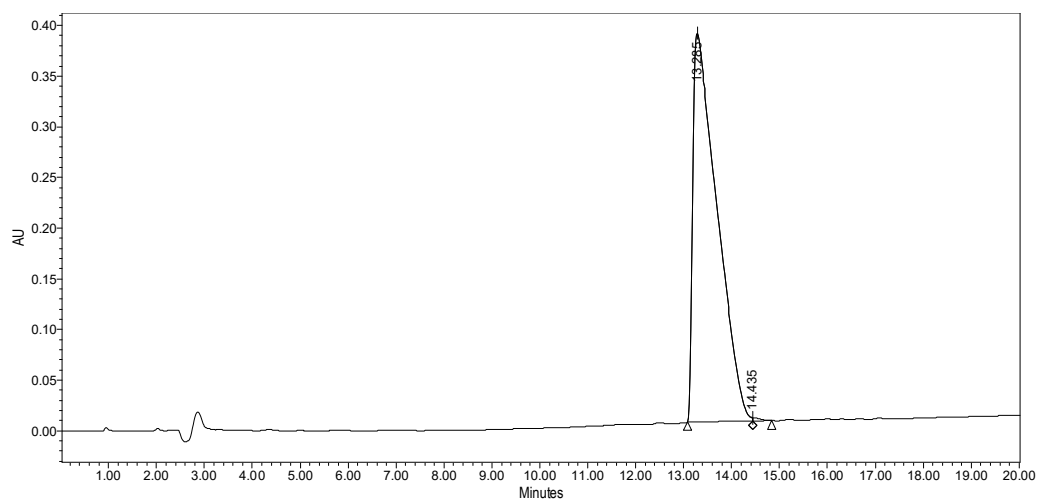
Supplementary Material



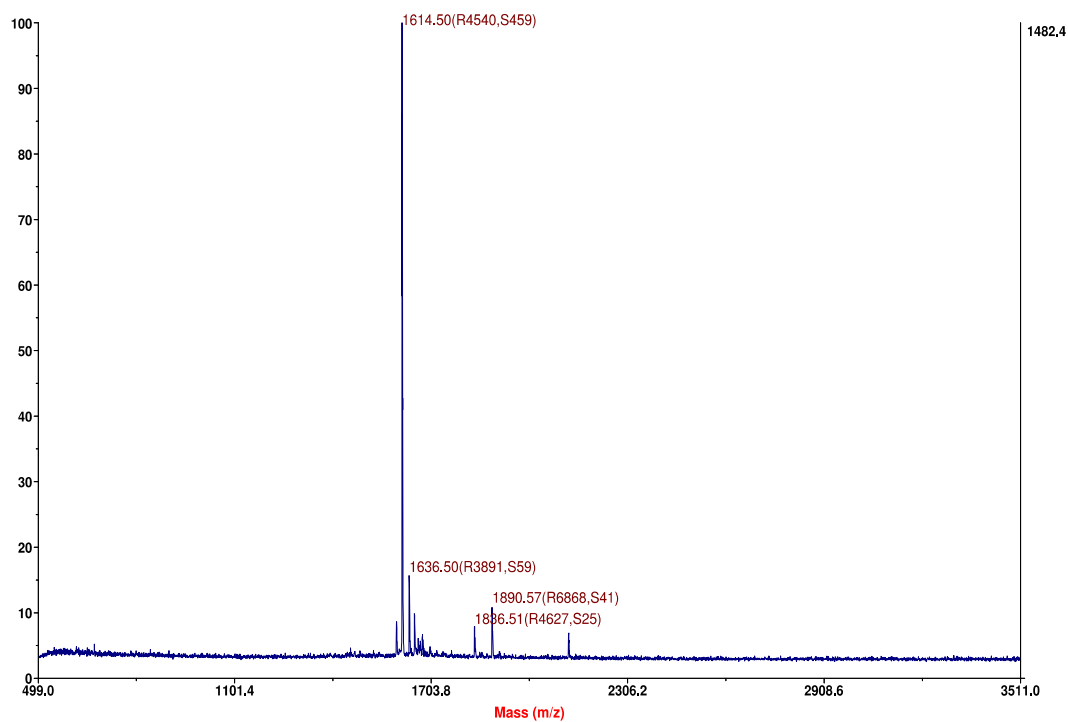
**Figure S1.** Analytical chromatogram of purified Aoa-xx-IKVAV obtained under the following conditions: column, Jupiter C<sub>18</sub> (5  $\mu$ m, 300 Å, 4.6 mm  $\times$  250 mm); injected volume, 200  $\mu$ L; flow rate, 0.5 mL/min; detector wavelength, 214 nm; eluent A, 0.05% TFA in MilliQ water; eluent B, 0.05% TFA in 2-propanol/water (40/60); gradient, from 40% to 55% of eluent B in 30 minutes.



**Figure S2.** ESI-ToF mass spectrum of purified Aoa-xx-IKVAV. The mass analysis confirmed the presence of the target peptide (theoretical weight: 855.06 Da, experimental weight: 855.49 Da).



**Figure S3.** Analytical chromatogram of purified EAK obtained under the following conditions: column, NovaPak HR C<sub>18</sub> (4  $\mu$ m, 60 Å, 3.9 mm  $\times$  300 mm); injected volume, 150  $\mu$ L; flow rate, 1 mL/min; detector wavelength, 214 nm; eluent A, 0.05% TFA in MilliQ water; eluent B, 0.05% TFA in CH<sub>3</sub>CN; gradient, from 13% to 33% of eluent B in 20 minutes.



**Figure S4.** MALDI mass spectrum of purified EAK. The mass analysis confirmed the presence of the target peptide (theoretical weight: 1614.79 Da, experimental weight: 1614.50 Da).

**Table S1.** XPS results.

Sample	Signal	Assignment	BE (eV)	FWHM (eV)	Atomic ratios (%)
PF-OxPVA	C1s	C–C	285.0	1.53	54
		C–N	286.1		27
		C–O	287.5		11
		C=O	288.9		6
		COOH	290.3		2
	O1s	C=O	531.0	2.05	53
		C–O	532.5		23
			533.5		19
		H <sub>2</sub> O	535.0		5
	OxPVA-IKVAV	C1s	C–C	1.42	52
			C–N		28
			C–O		12
			C=O		5
			COOH		3
		O1s	C=O	2.06	58
			C–O		35
			H <sub>2</sub> O		7
	N1s	C–N	400.7	2.55	100