

Supporting Information

Trimethyllysine-containing trityl tag for solubilizing hydrophobic peptides

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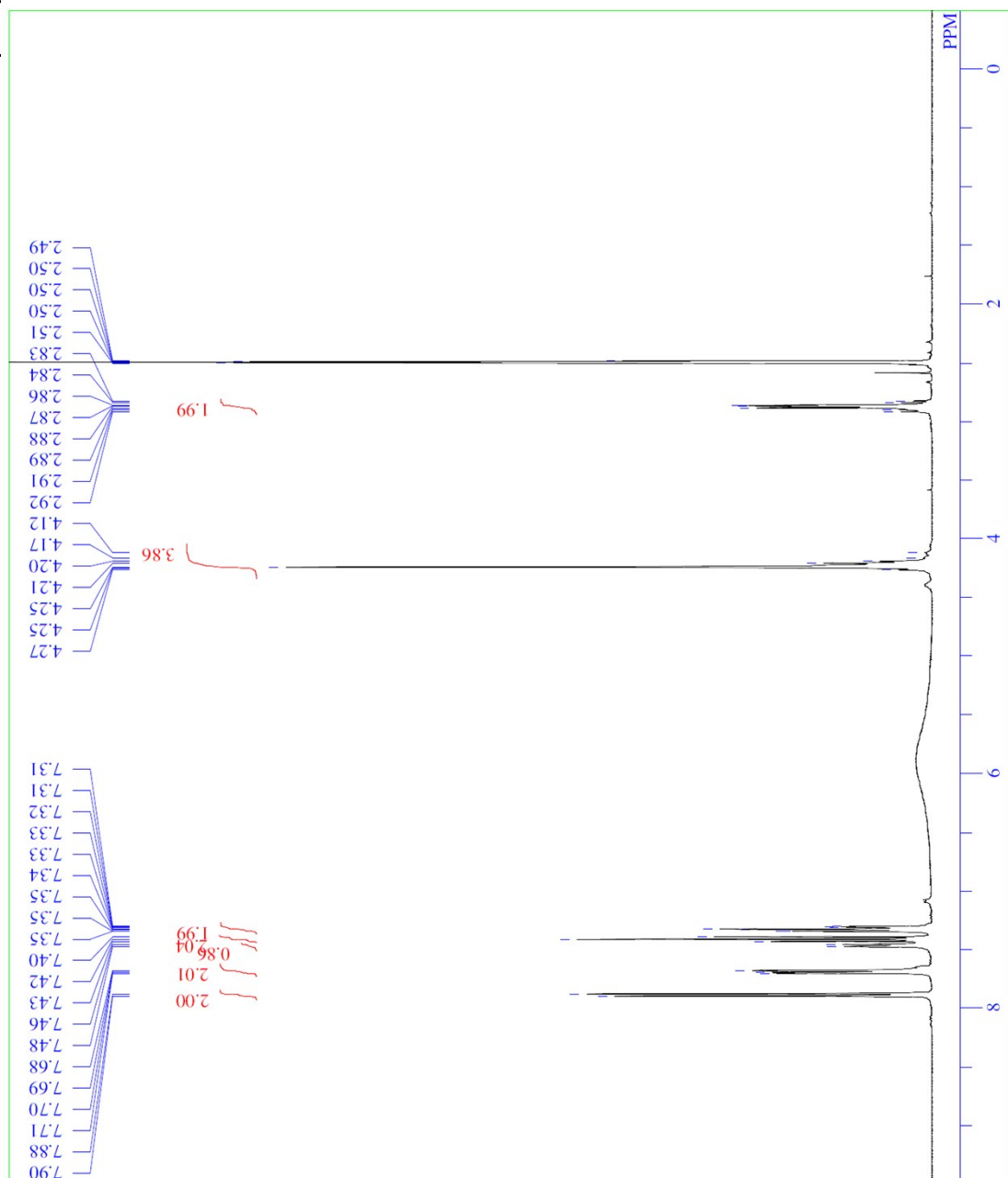
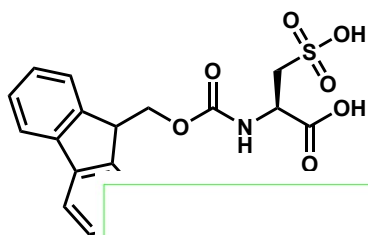
Peptide Institute, Inc., Ibaraki, Osaka 567-0085, Japan

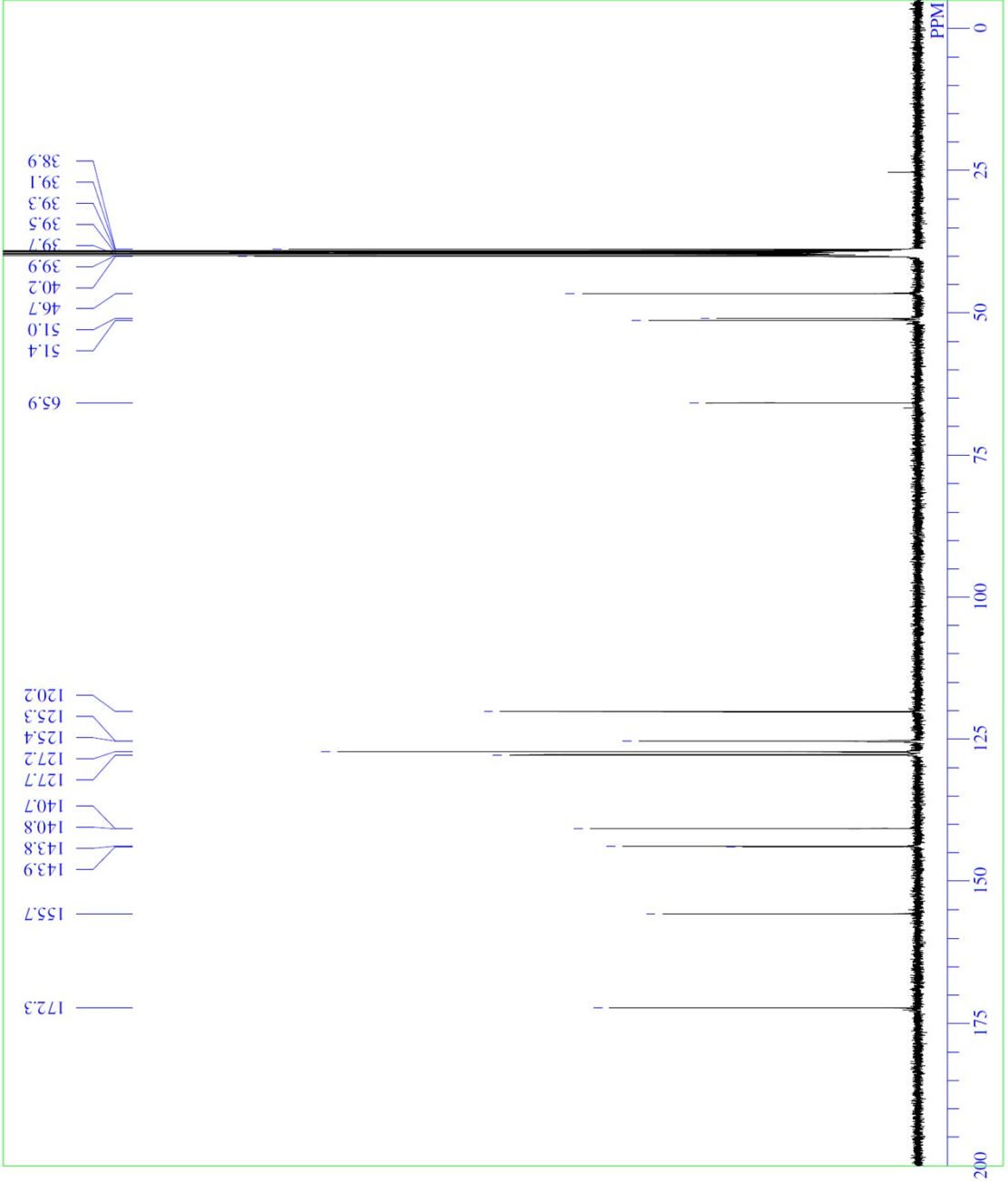
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1. NMR spectra of Fmoc-Cys(O₃H)-OH

Fmoc-Cys(O₃H)-OH





2. Solubilities of Trt-K₅/R₅ tag-attached SPP4 in different solvents applied for various ligation techniques

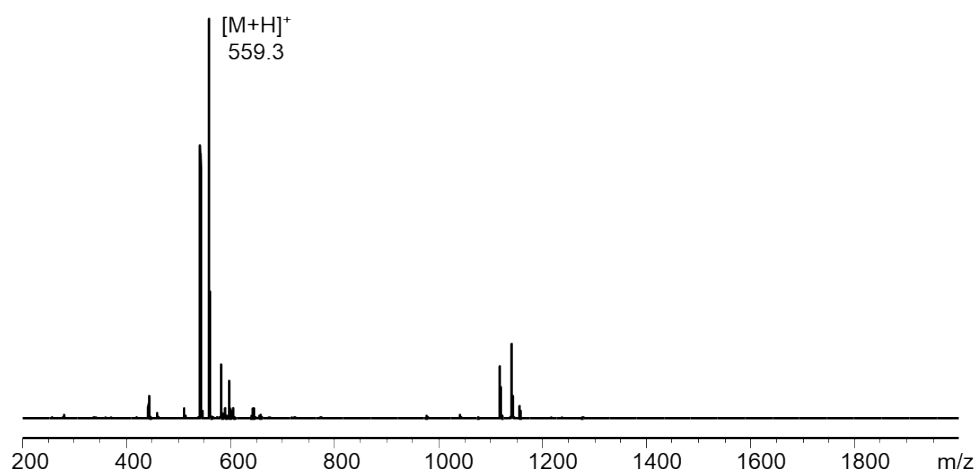
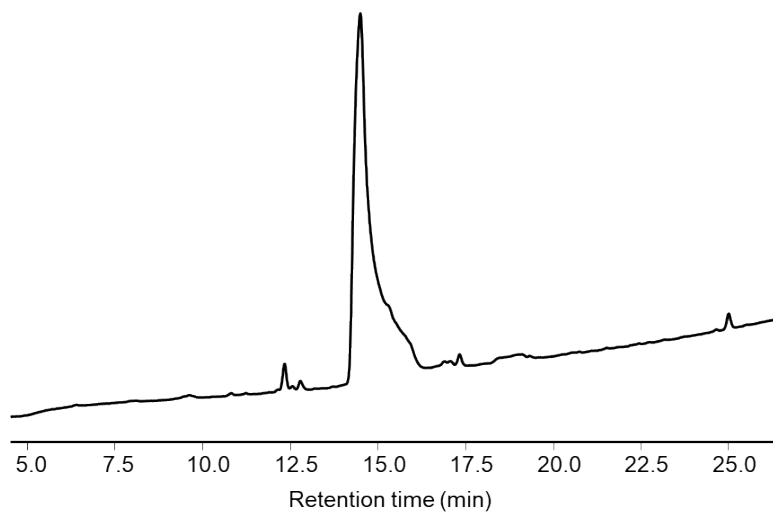
Table S1. Solubilities of Trt K₅/R₅ tag-attached SPP4^a

	Solubility / mM		
	6 M Gn·HCl, 0.2 M phosphate (pH 7)	DMSO:H ₂ O (9:1)	Pyridine:AcOH (1:1)
SPP4	0.26	4.13	0.02
SPP4-Trt-K ₅	> 5.00	> 5.00	0.01
SPP4-Trt-R ₅	> 5.00	> 5.00	0.01

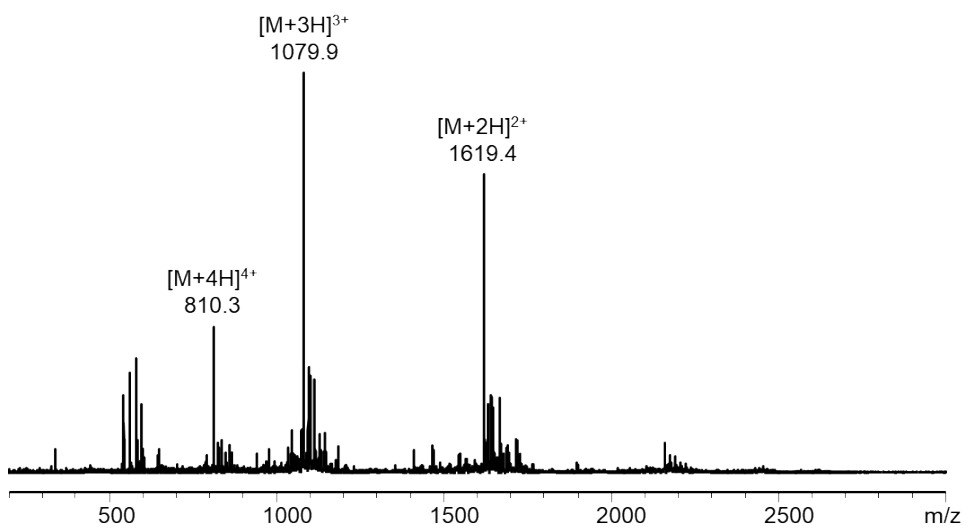
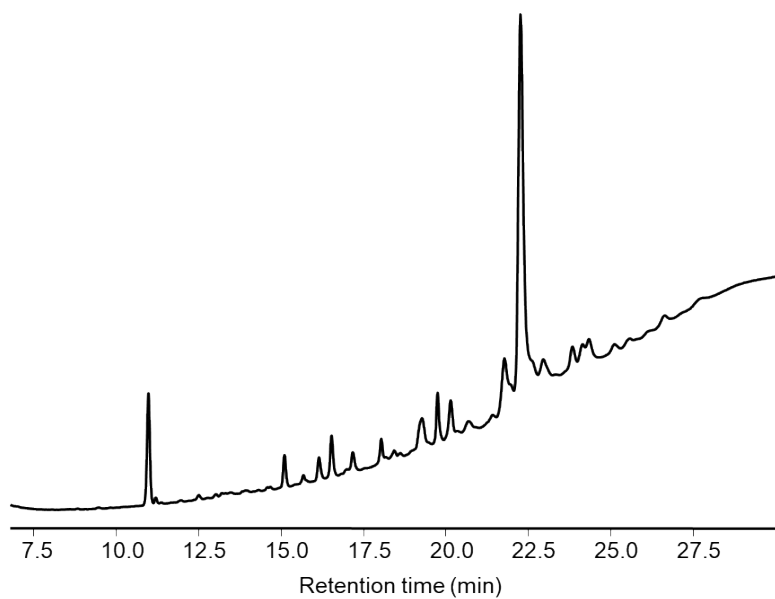
^a Solubility was evaluated in a similar method to Fig. 5.

3. Analytical HPLC chromatograms and ESI-MS spectra of peptides.

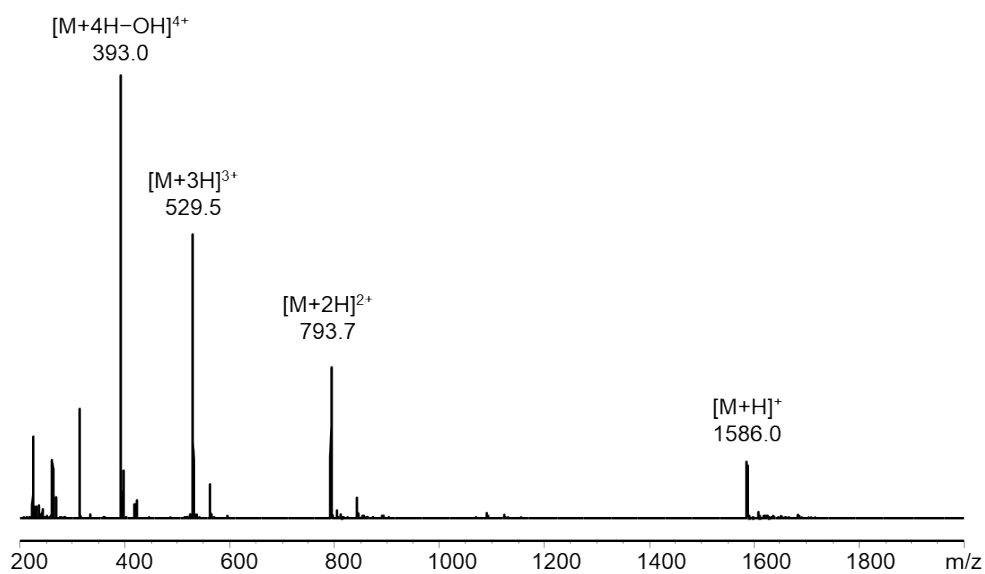
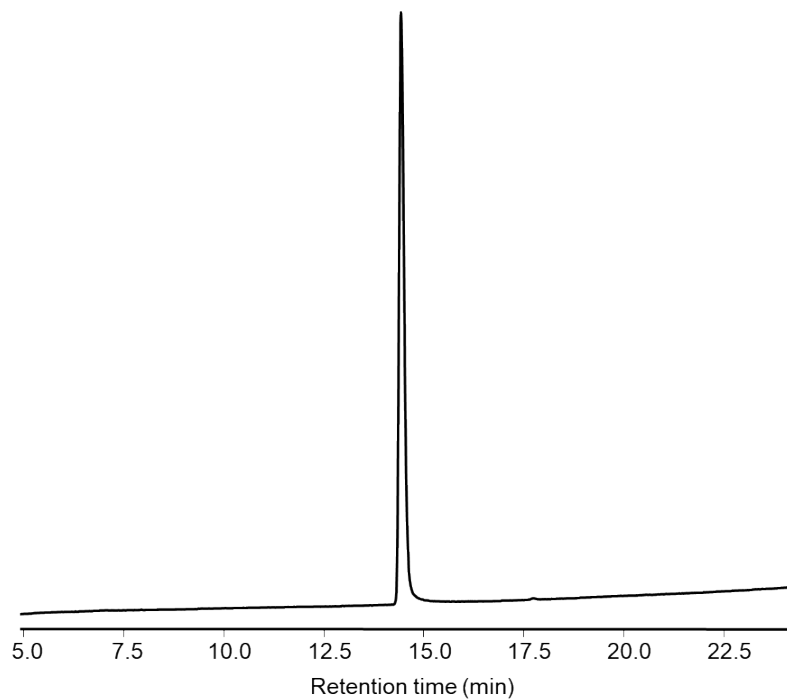
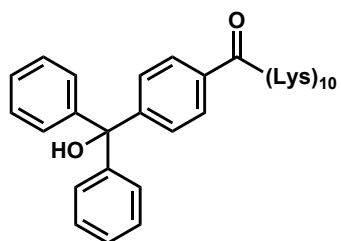
Ac-VVCVV-NH₂ (**1**)



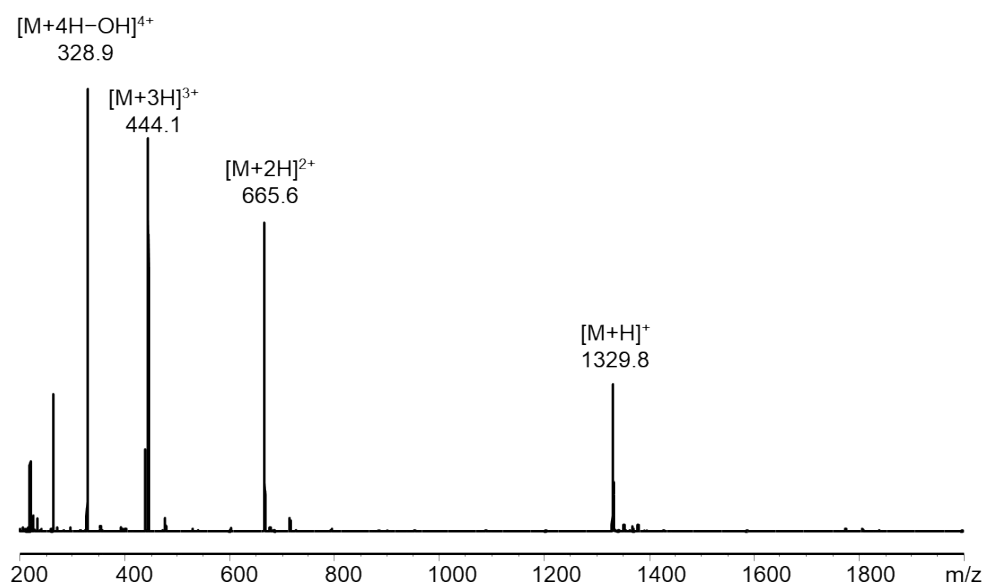
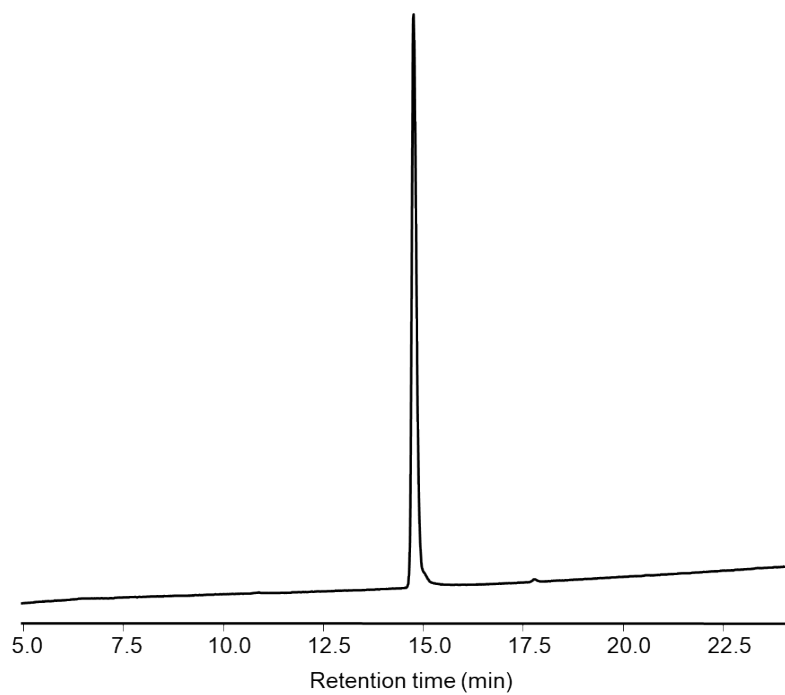
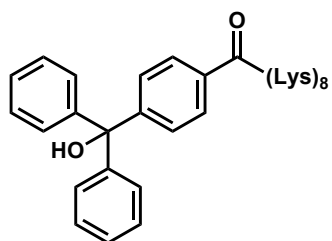
STGCILLGGLFIYDVFVWVFGTNNMVTVAKS-NH₂ = SPP4 (2)



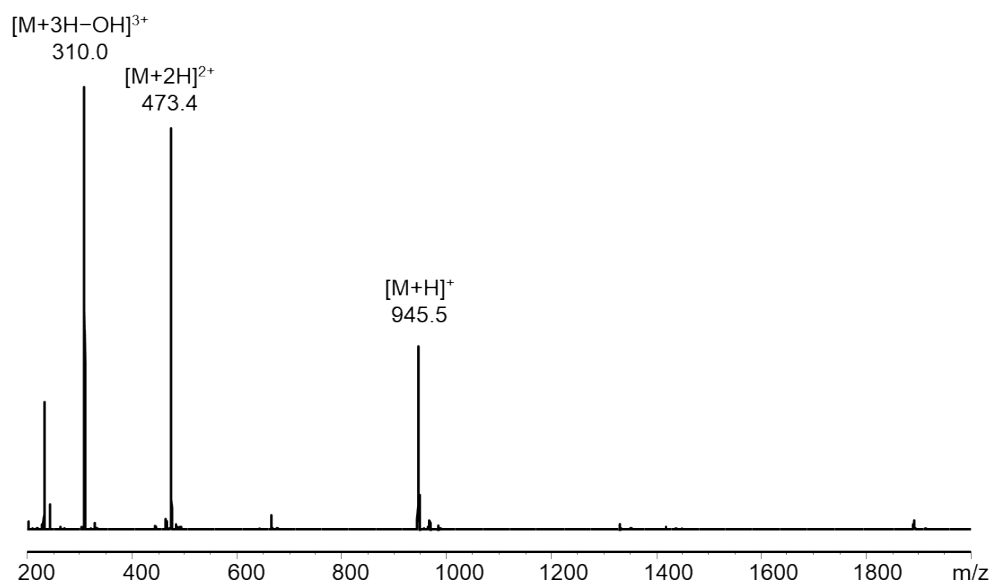
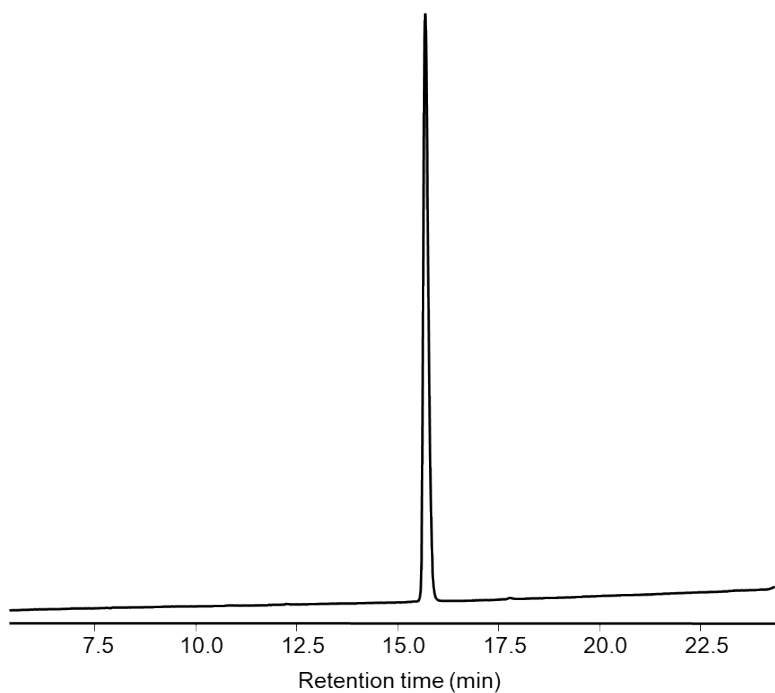
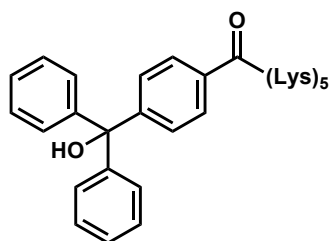
Trt(OH)-K₁₀



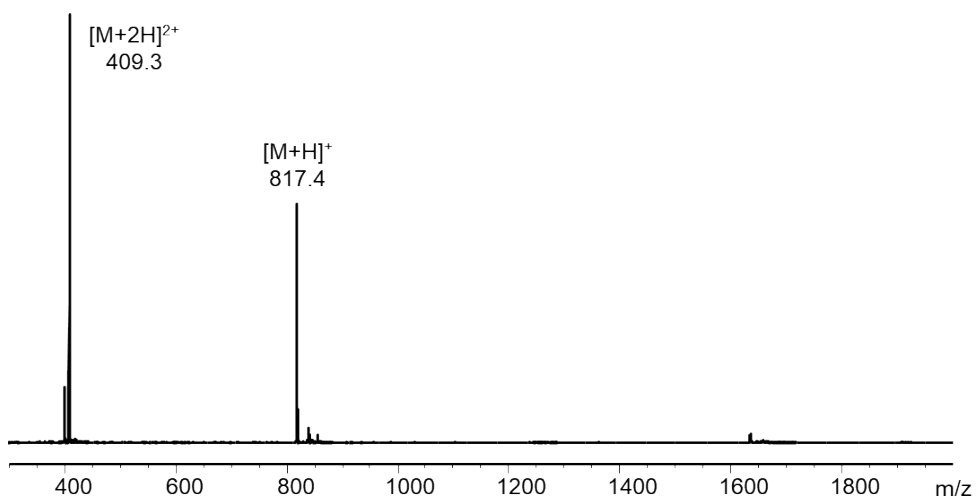
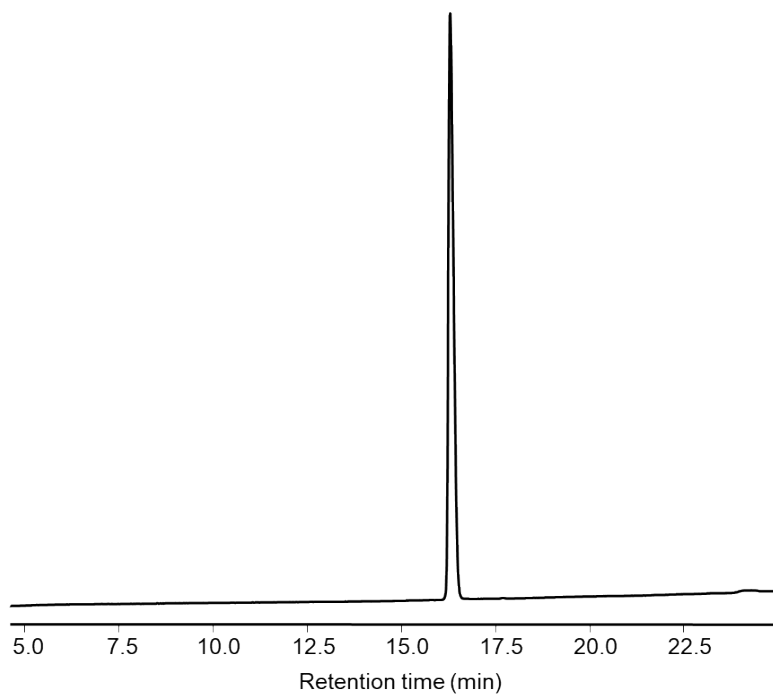
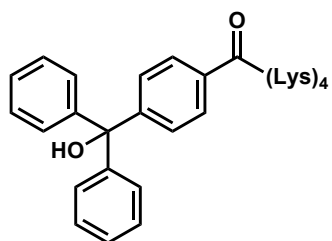
Trt(OH)-K₈



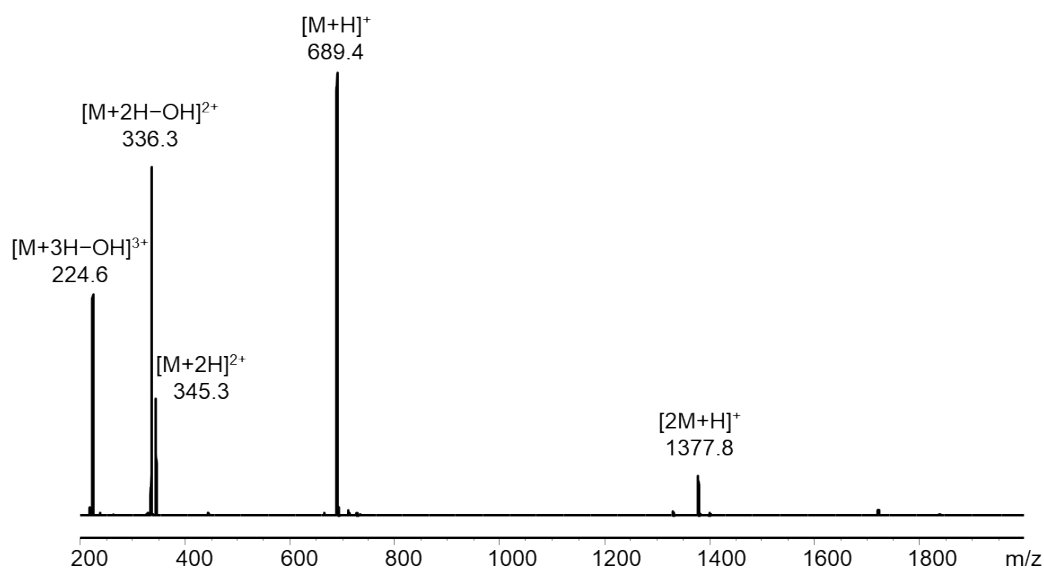
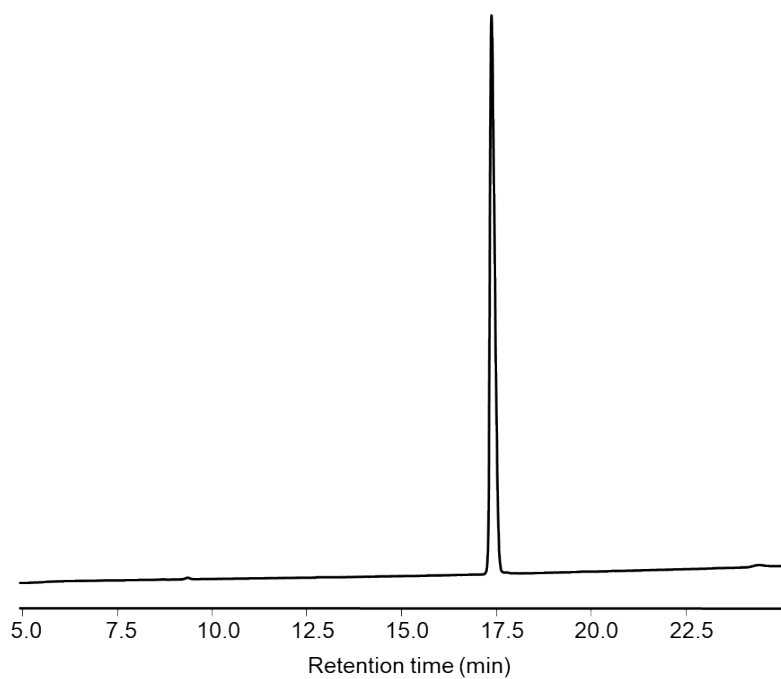
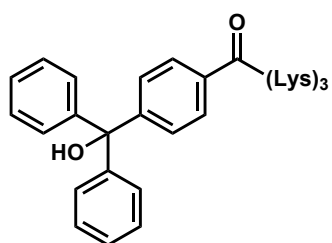
Trt(OH)-K₅



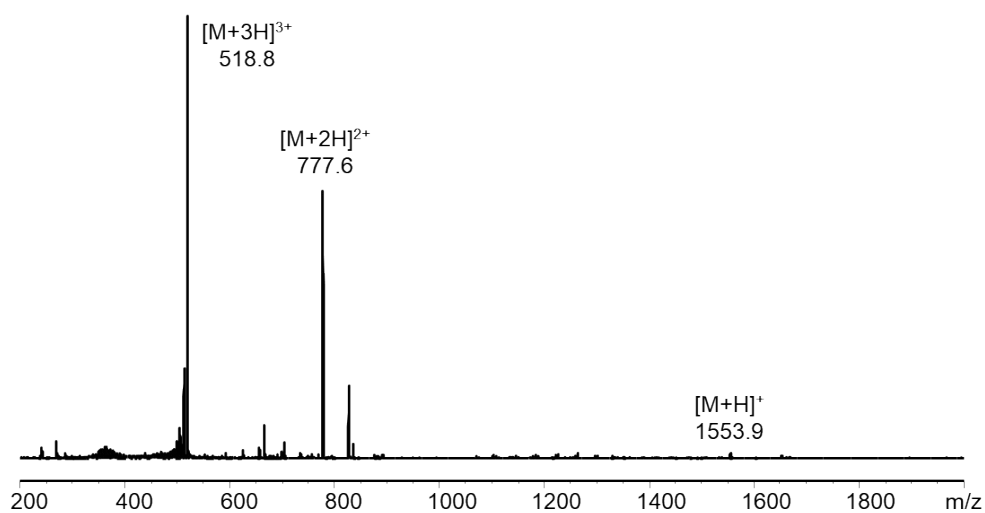
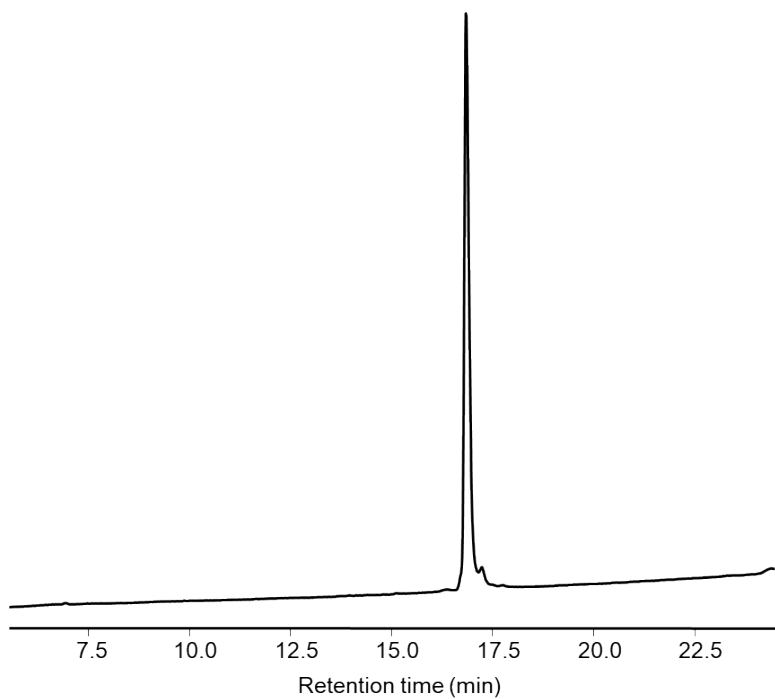
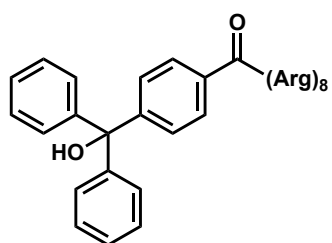
Trt(OH)-K₄



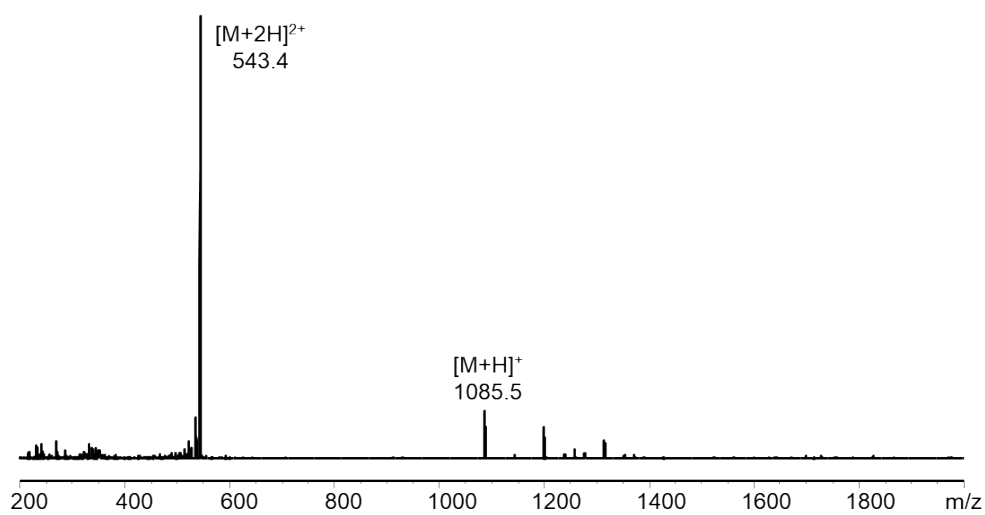
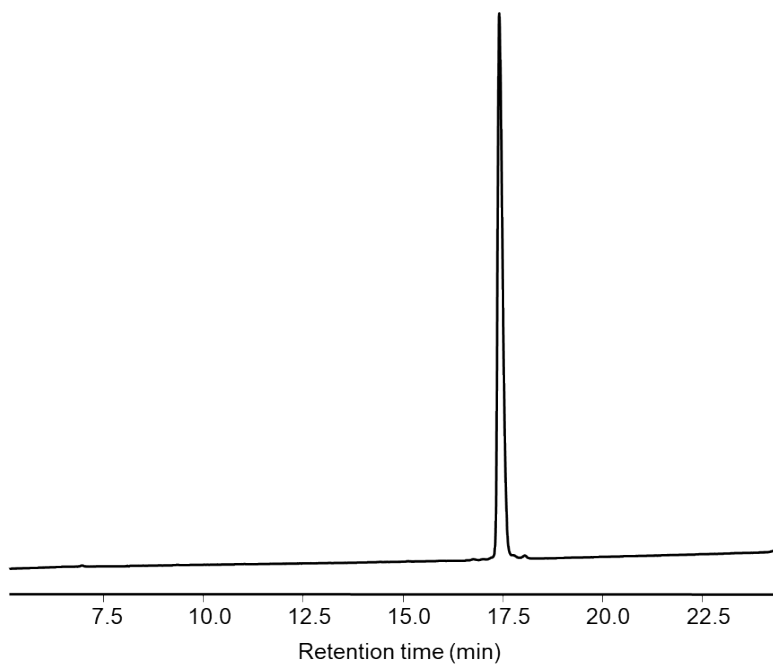
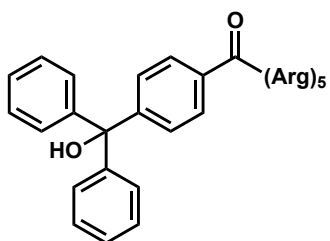
Trt(OH)-K₃



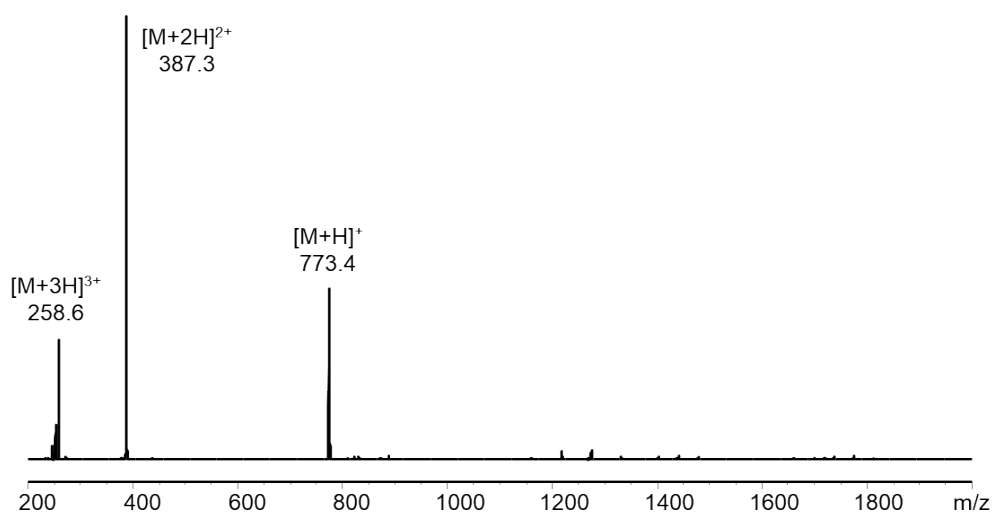
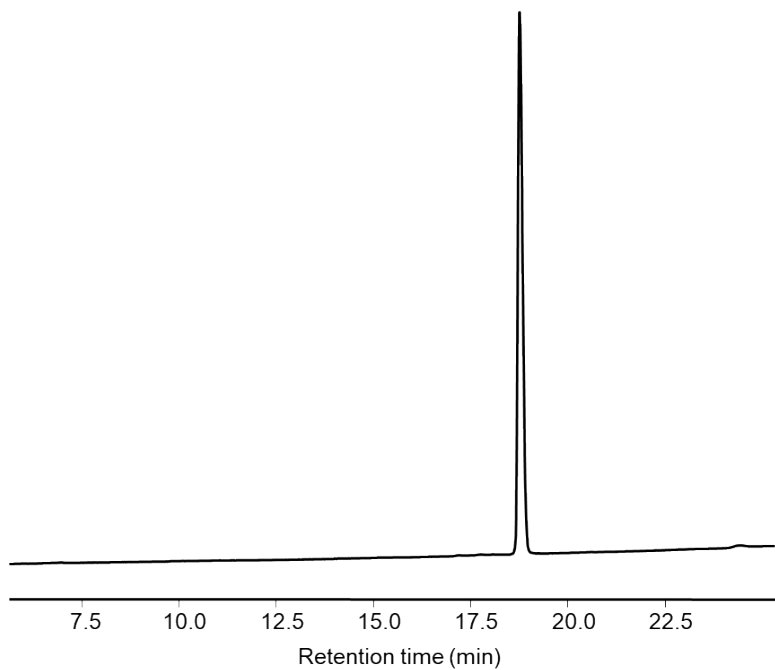
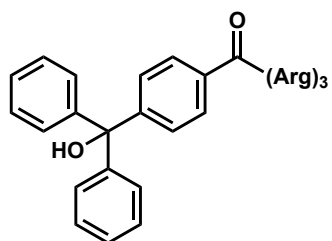
Trt(OH)-R₈



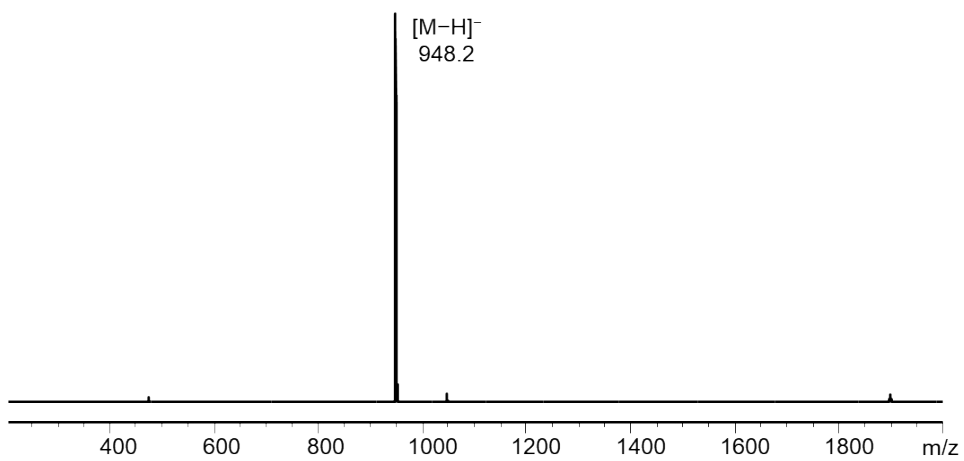
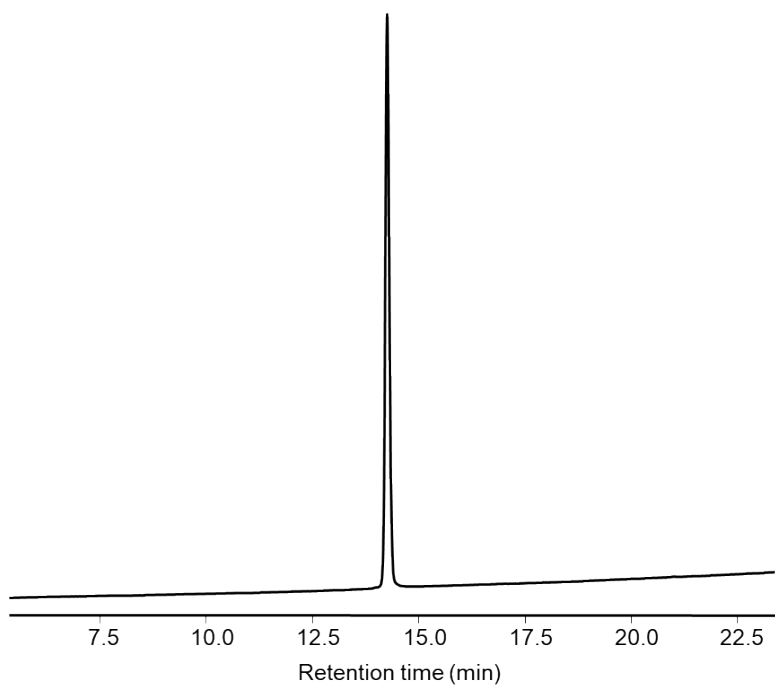
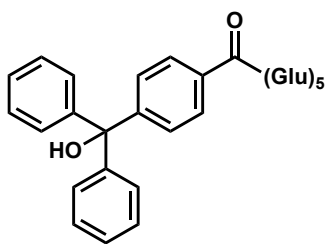
Trt(OH)-R₅



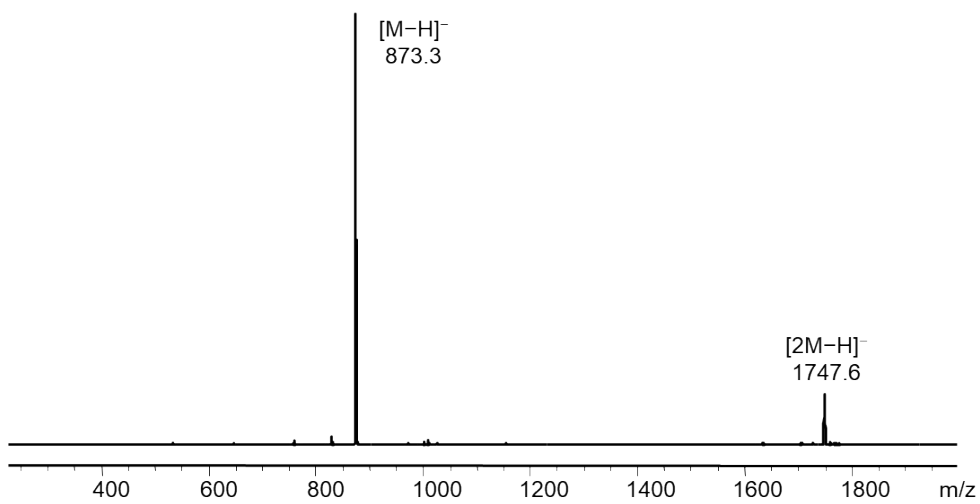
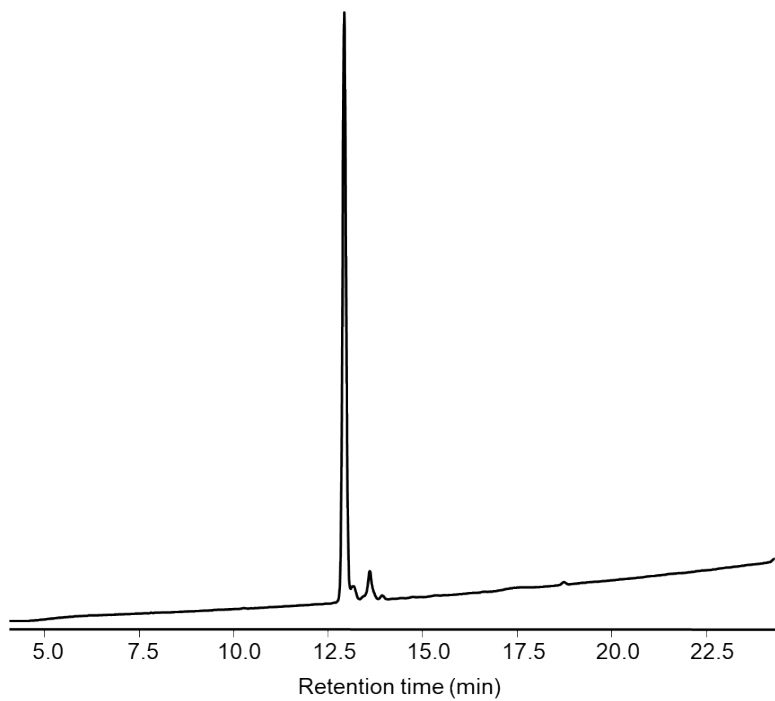
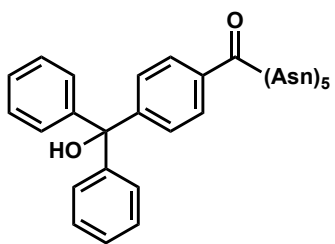
Trt(OH)-R₃

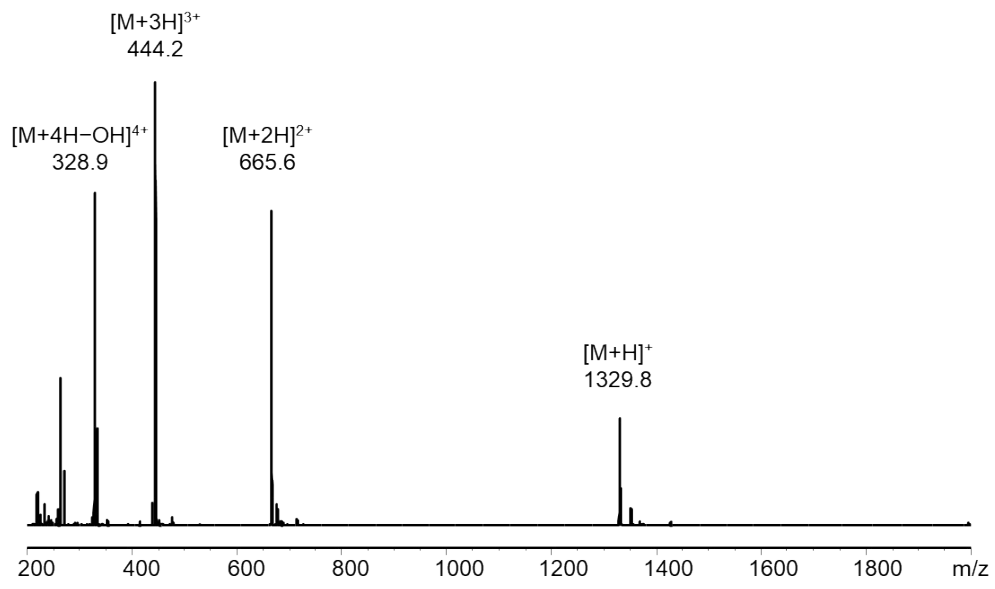


Trt(OH)-E₅

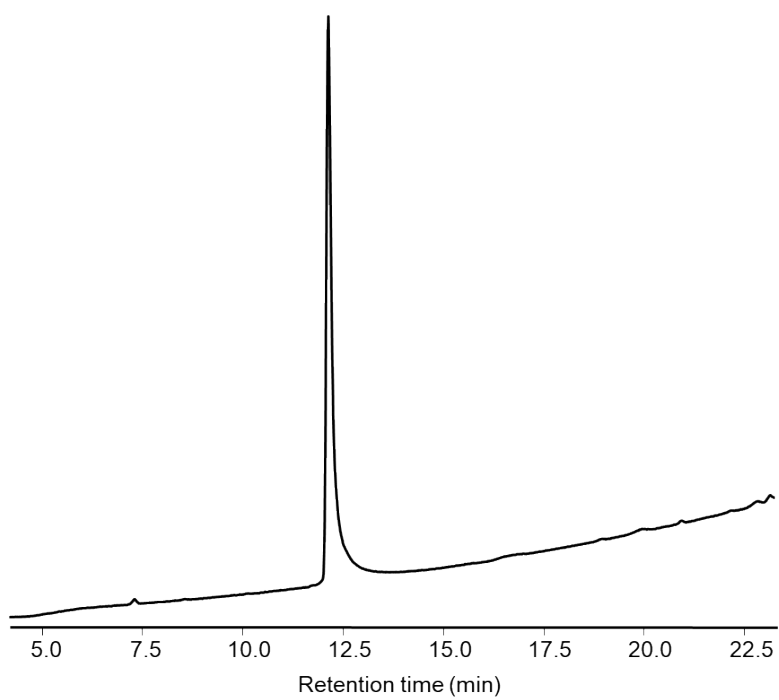
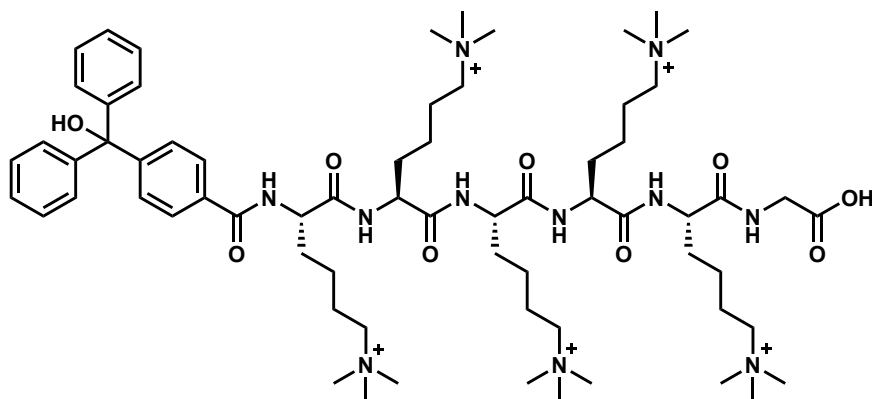


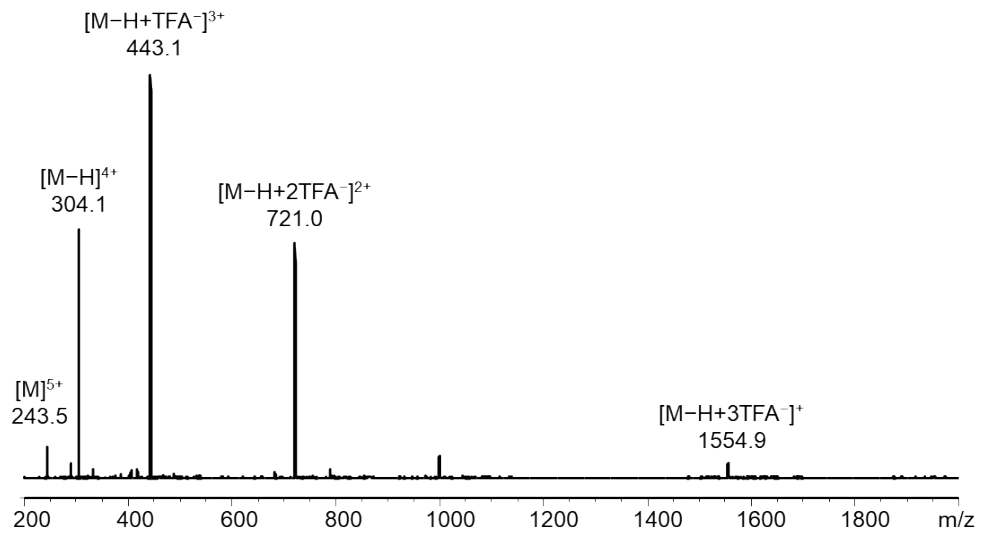
Trt(OH)-N₅



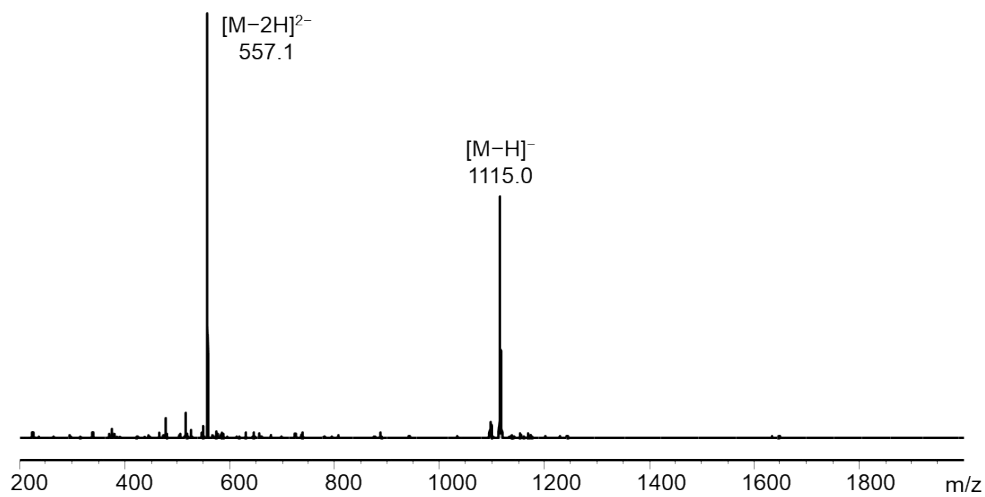
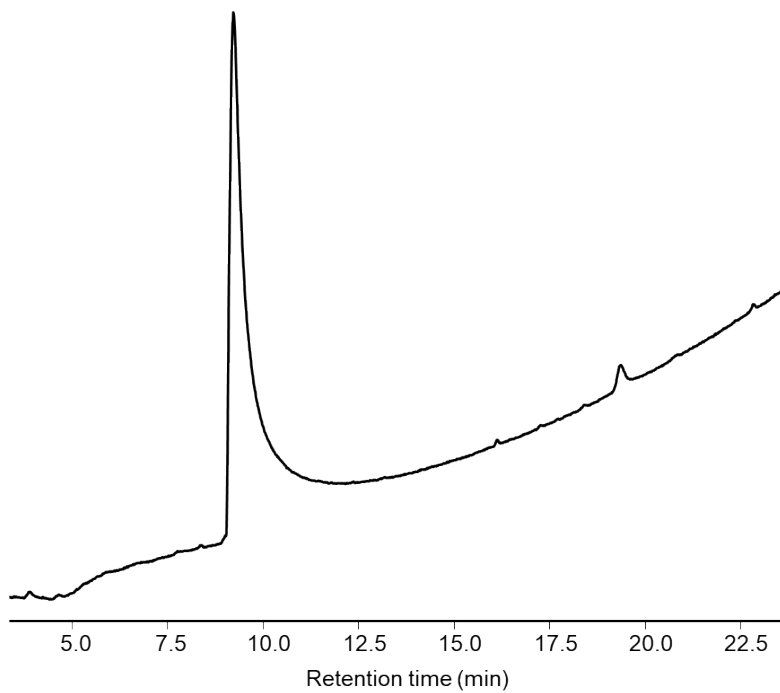
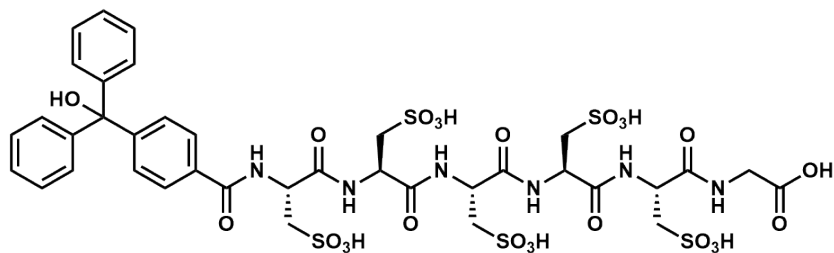


Trt(OH)-[K(Me₃)]₅

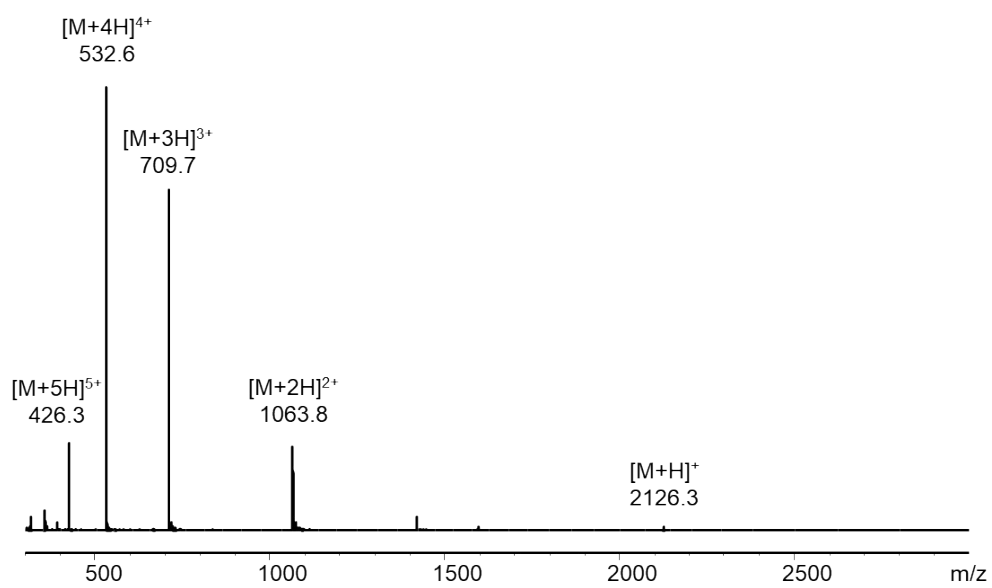
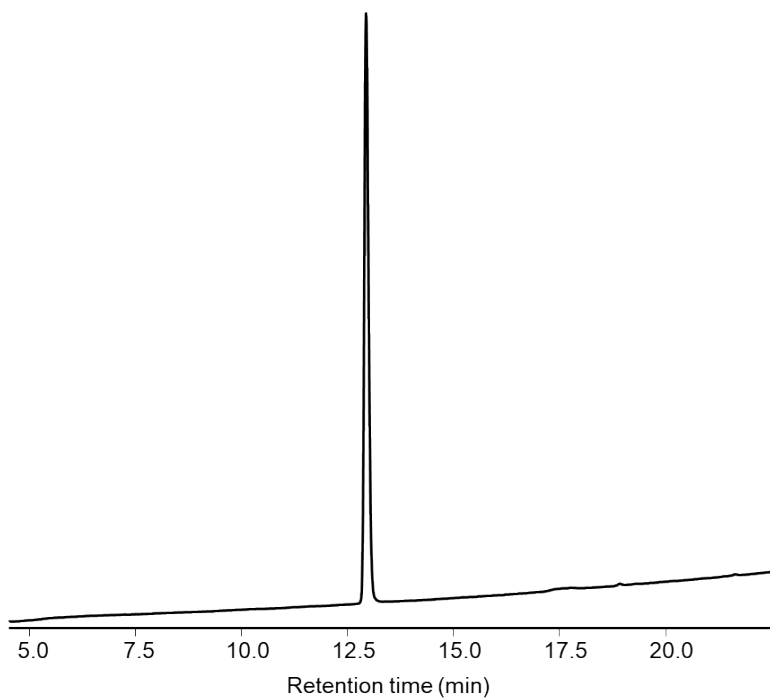




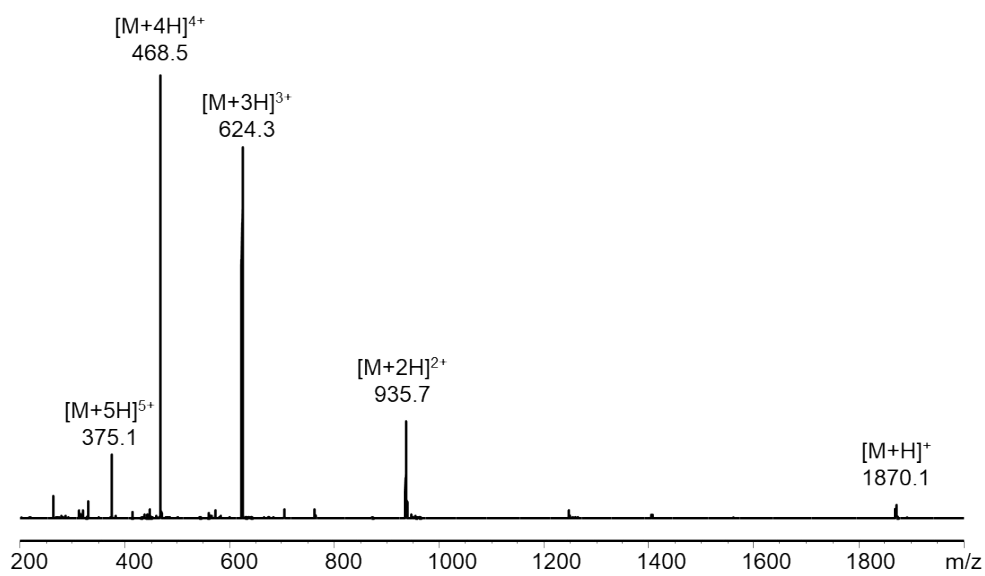
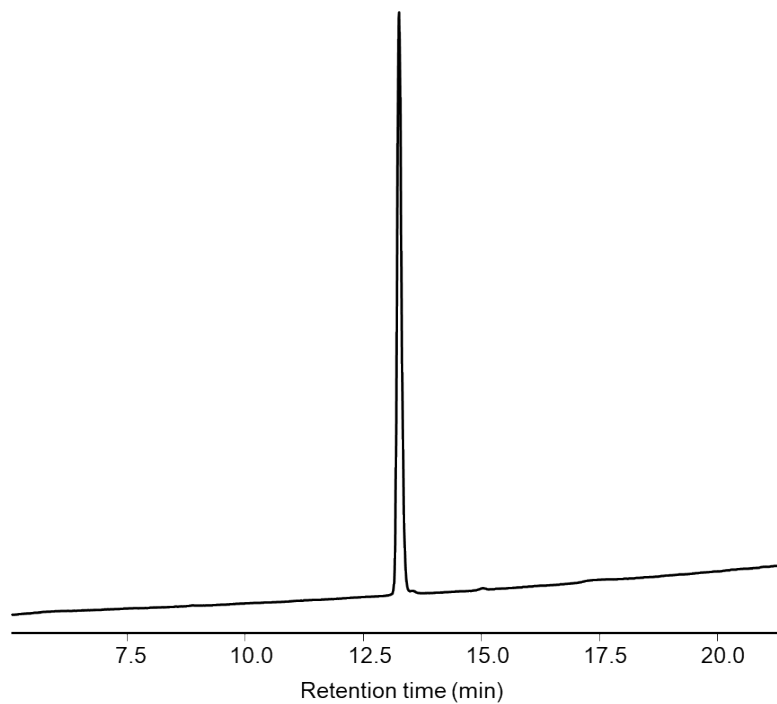
Trt(OH)-[C(O₃H)]₅



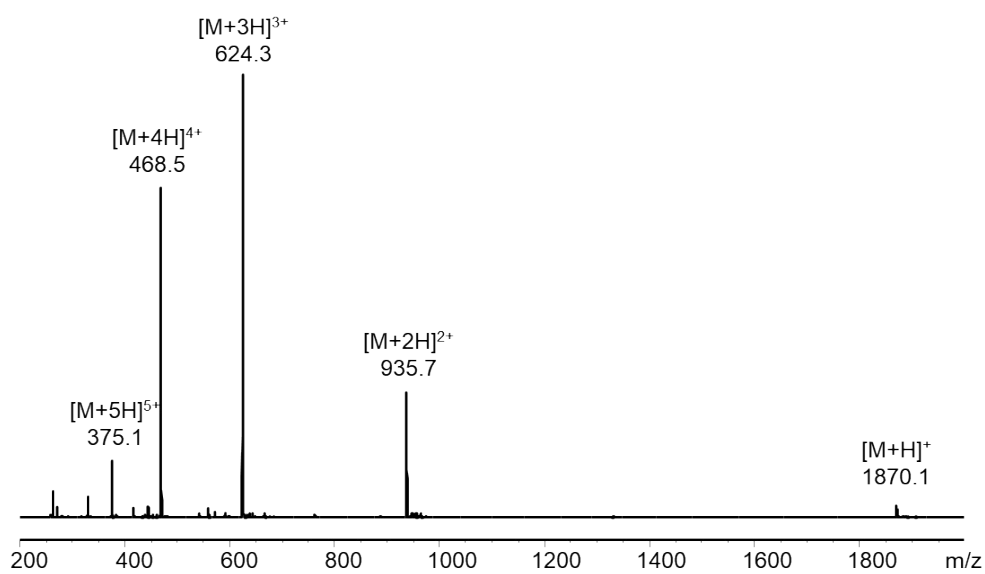
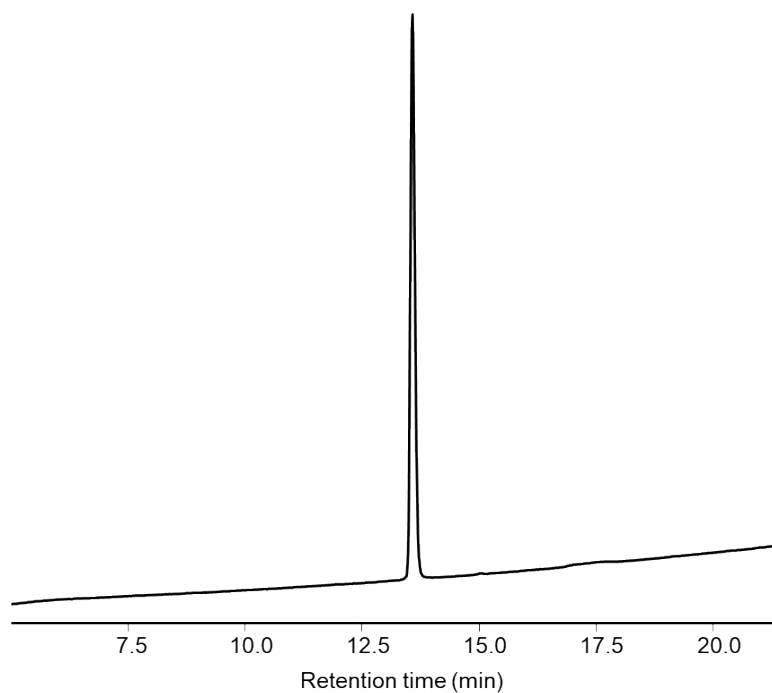
Ac-VVC(Trt-K₁₀)VV-NH₂



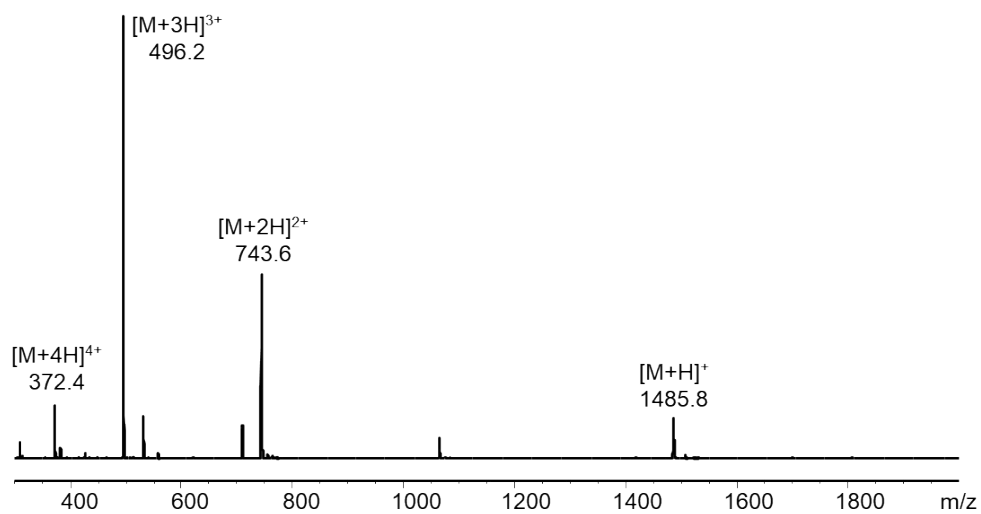
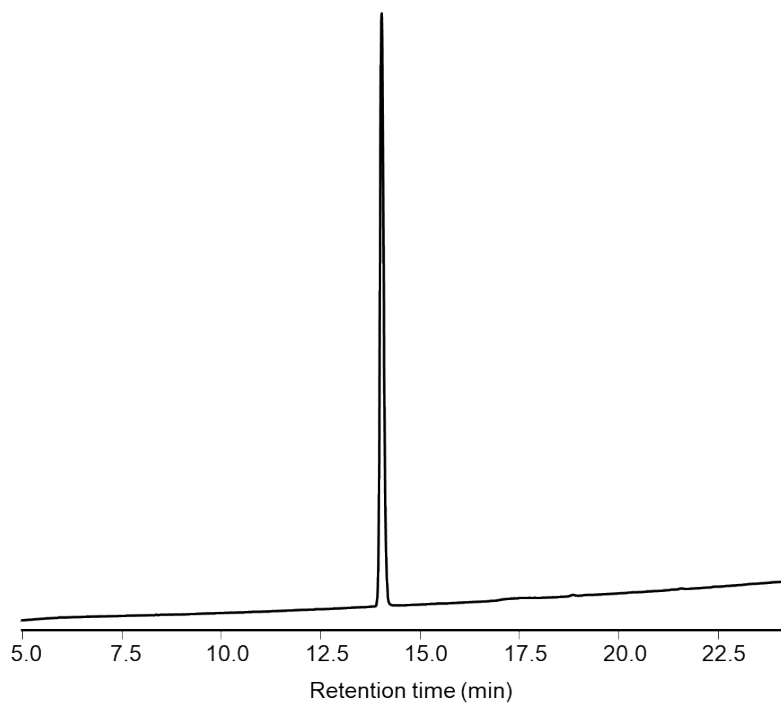
Ac-VVC(Trt-K₈)VV-NH₂



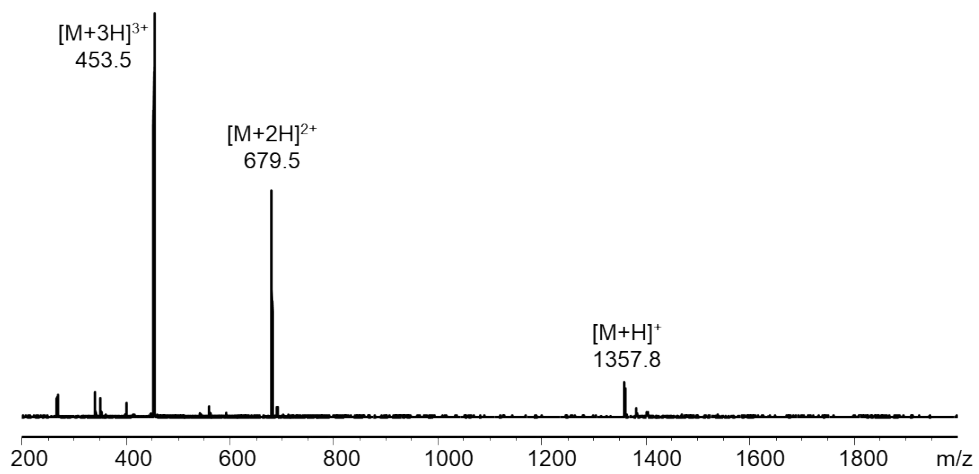
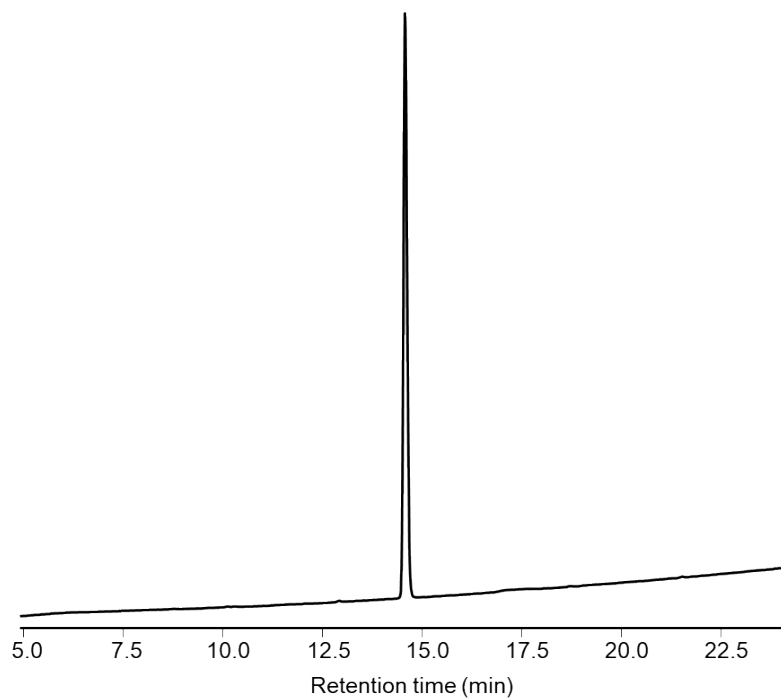
Ac-VVC(Trt-branched K₈)VV-NH₂



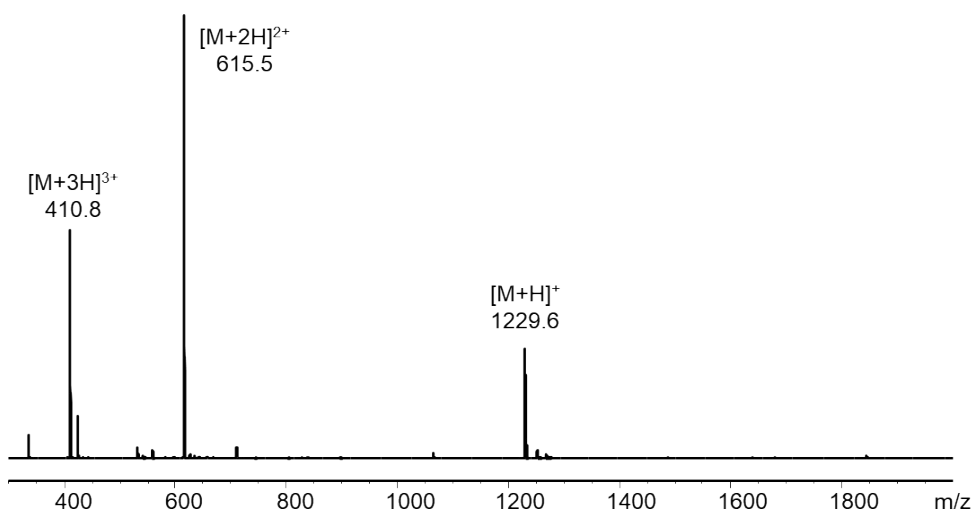
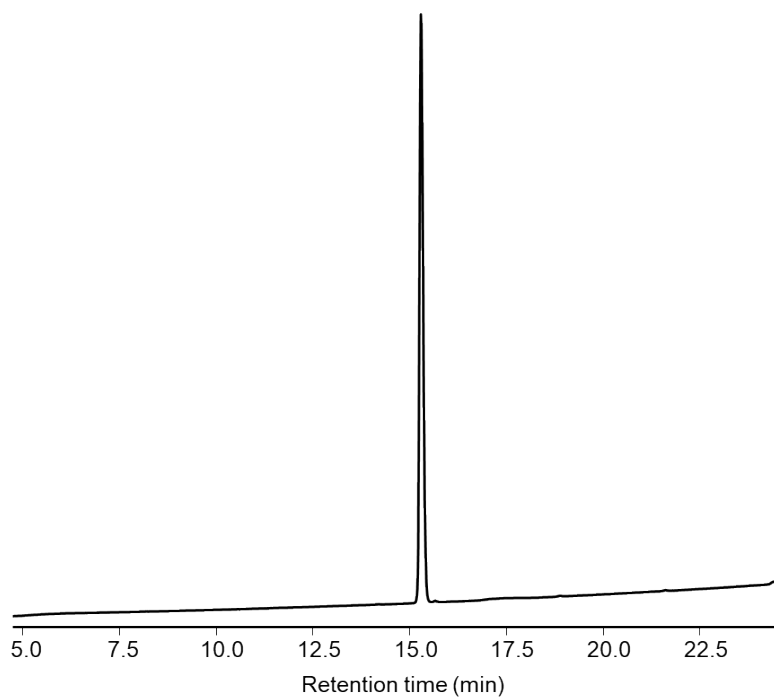
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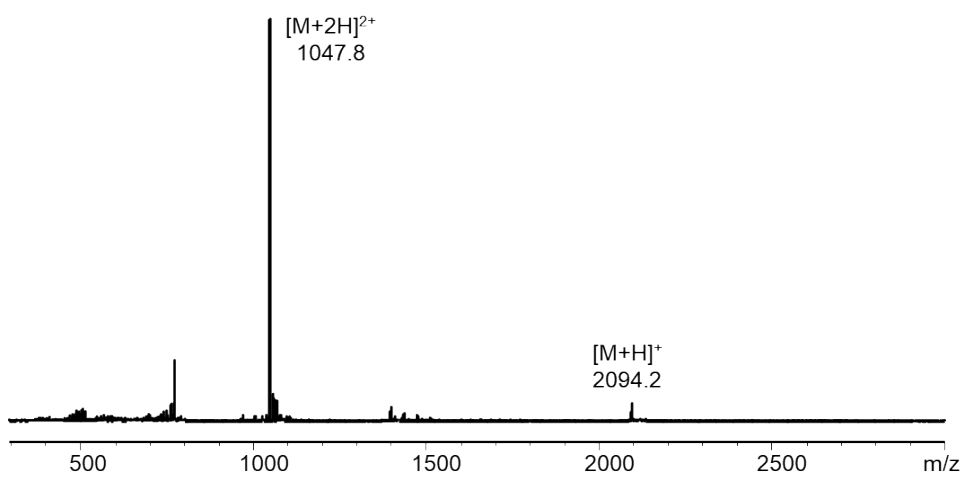
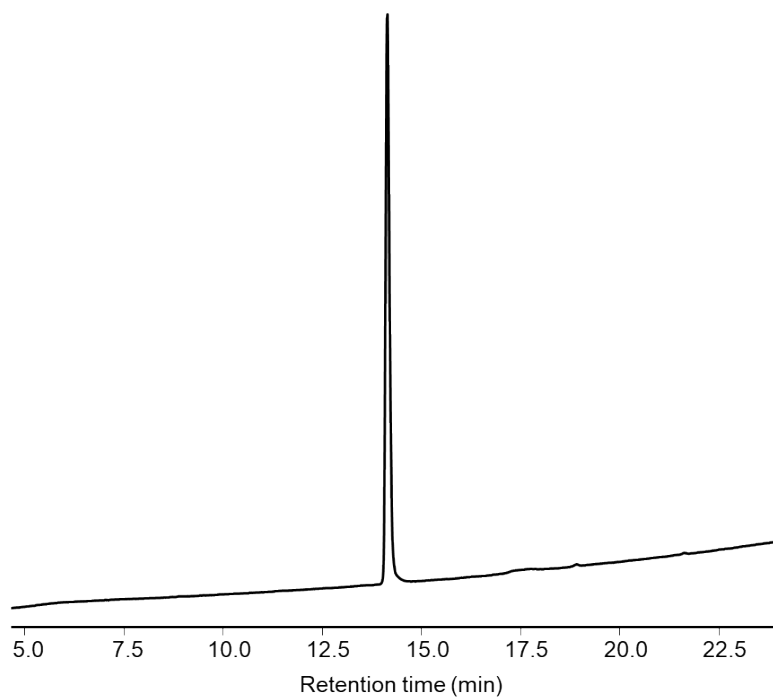
Ac-VVC(Trt-K₄)VV-NH₂



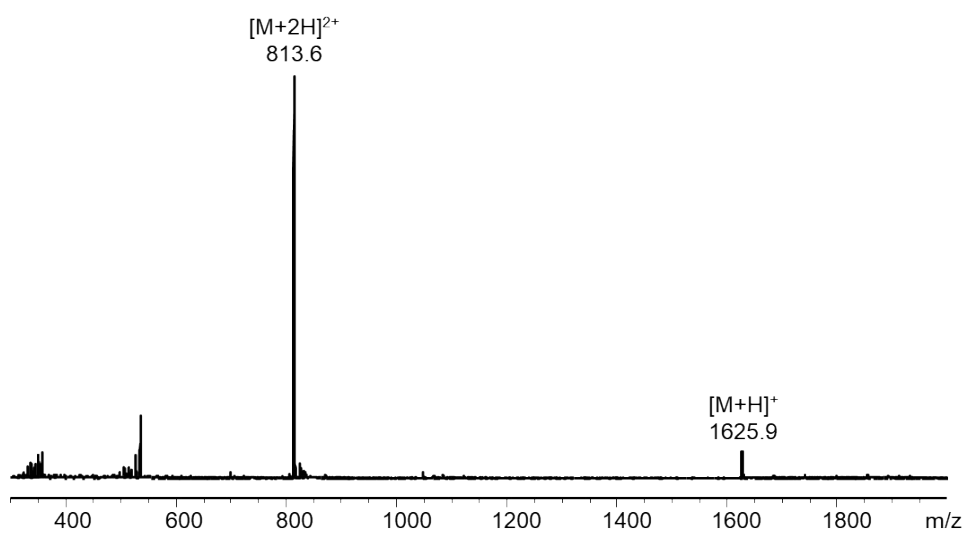
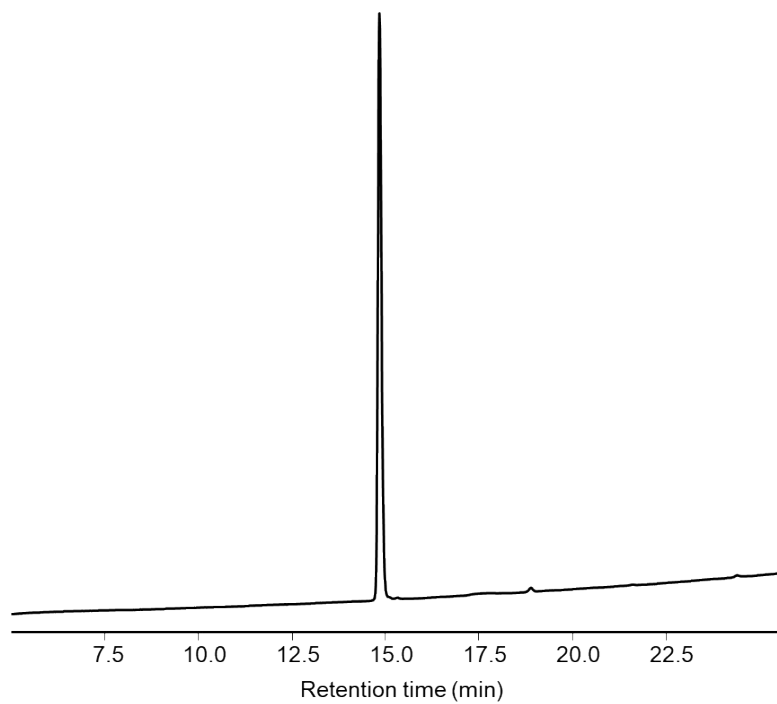
Ac-VVC(Trt-K₃)VV-NH₂



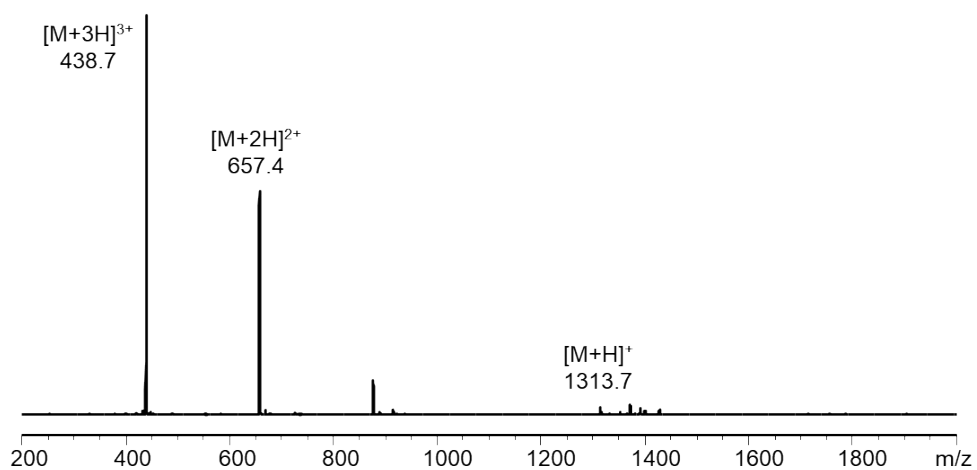
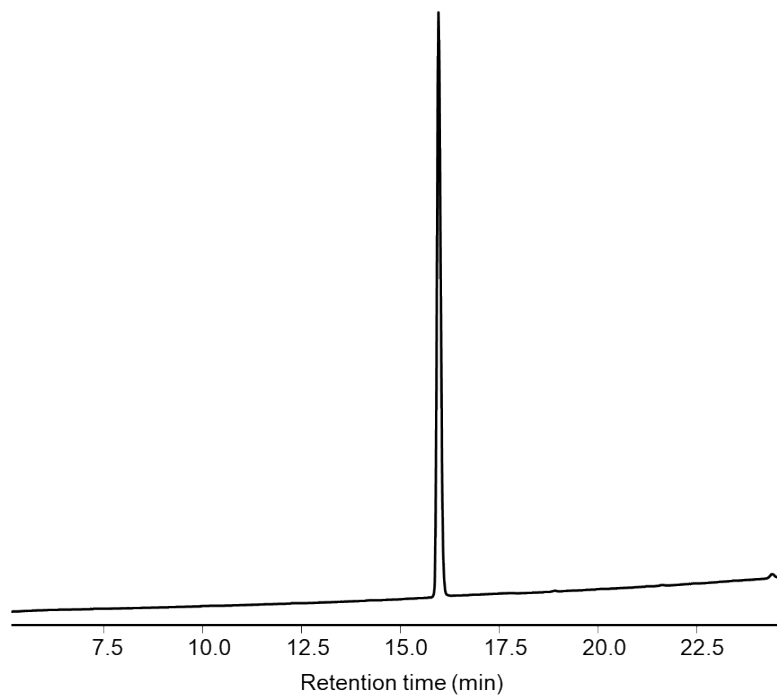
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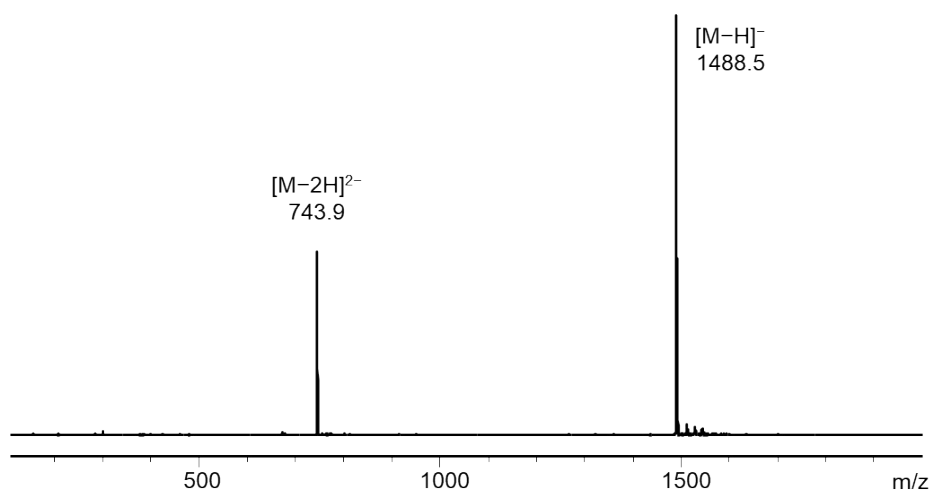
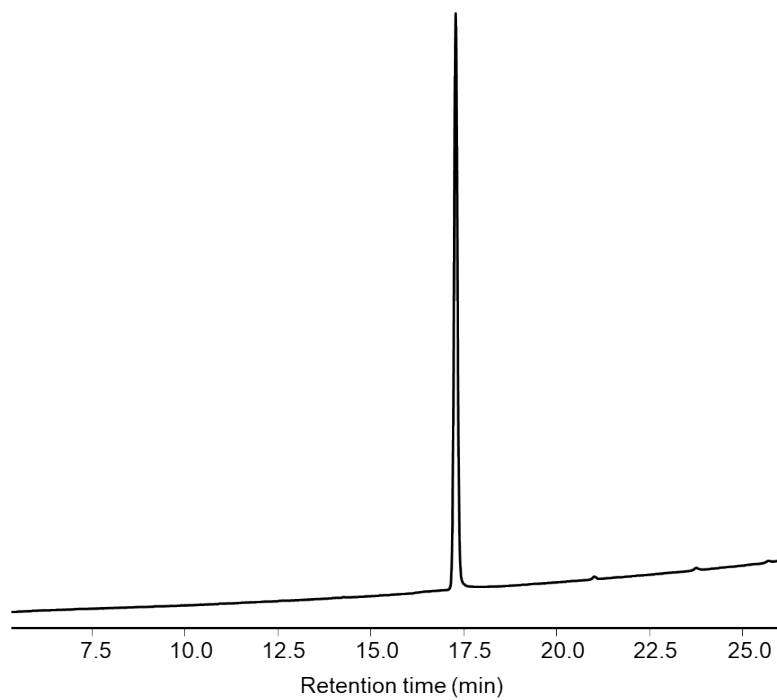
Ac-VVC(Trt-R₅)VV-NH₂



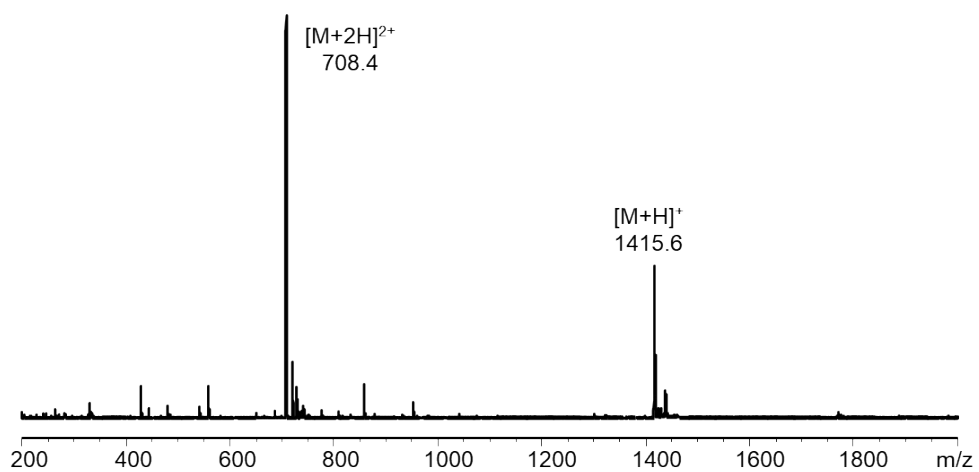
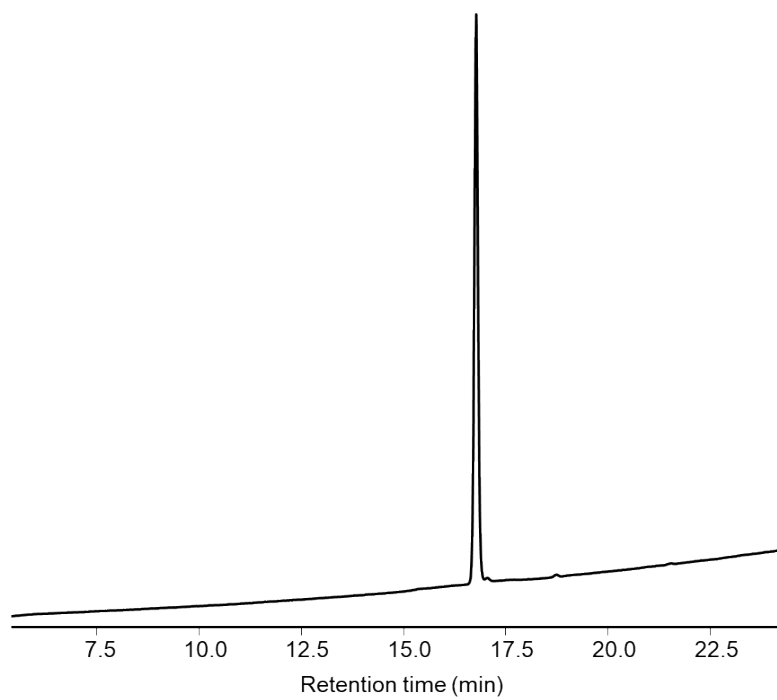
Ac-VVC(Trt-R₃)VV-NH₂



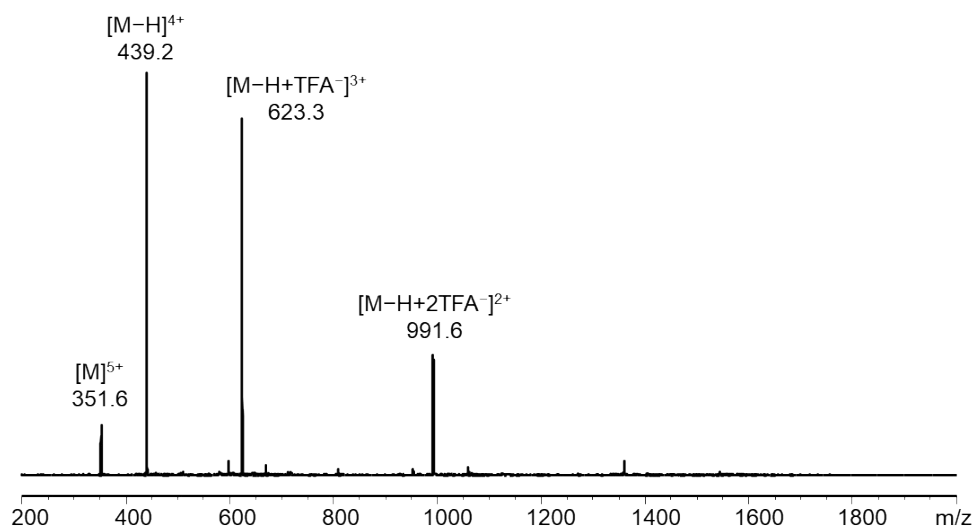
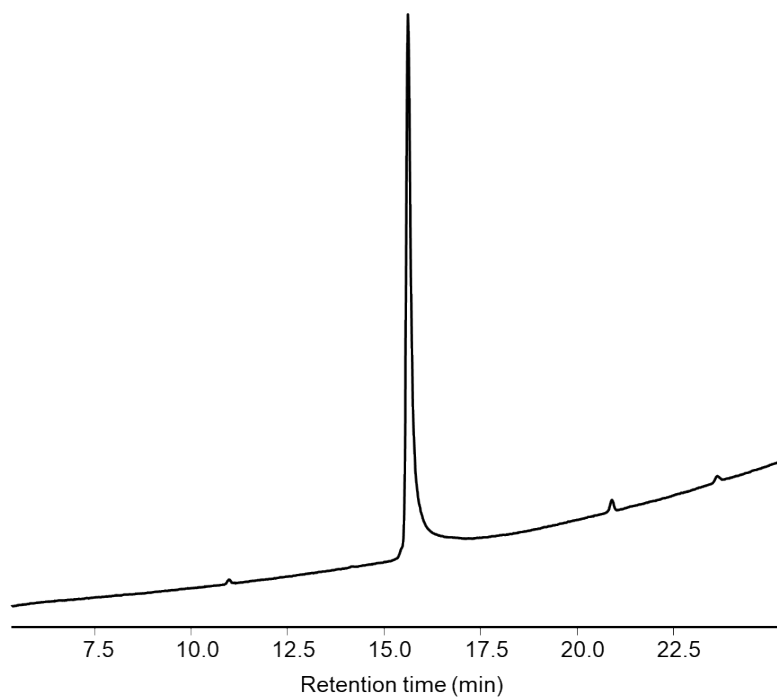
Ac-VVC(Trt-E₃)VV-NH₂



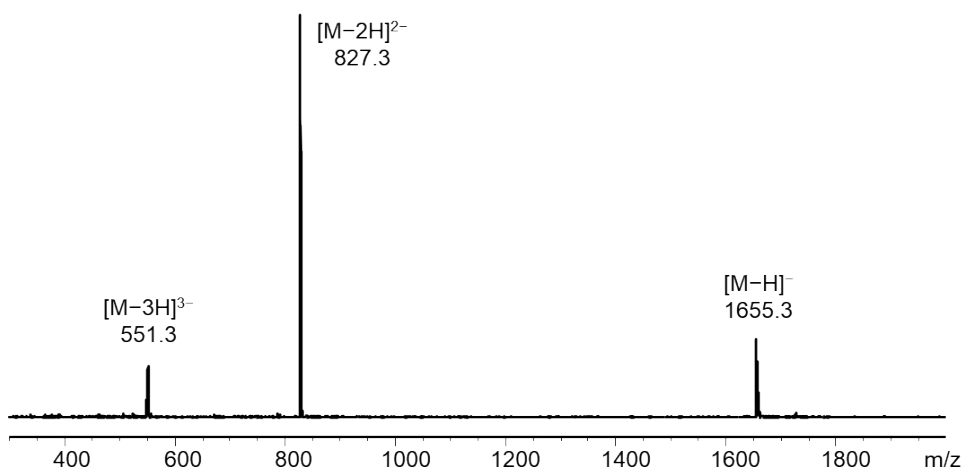
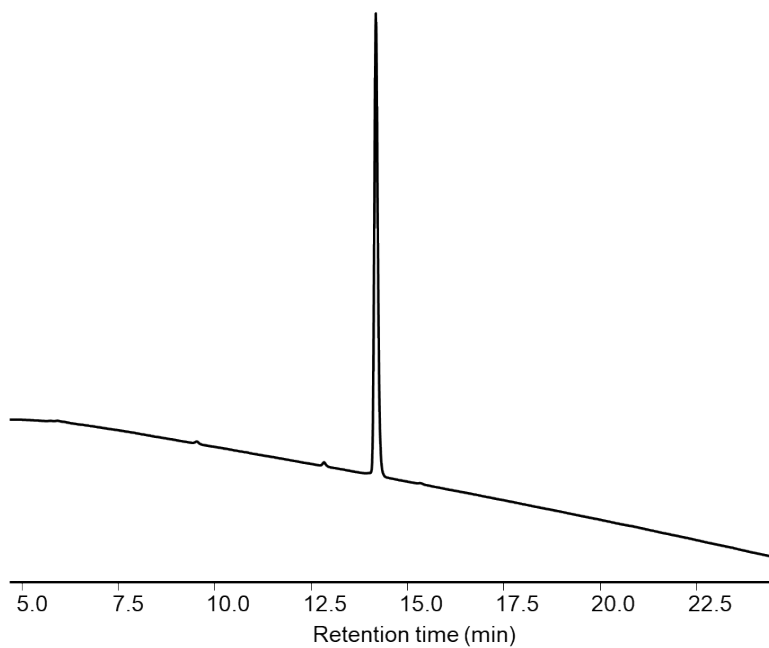
Ac-VVC(Trt-N₅)VV-NH₂



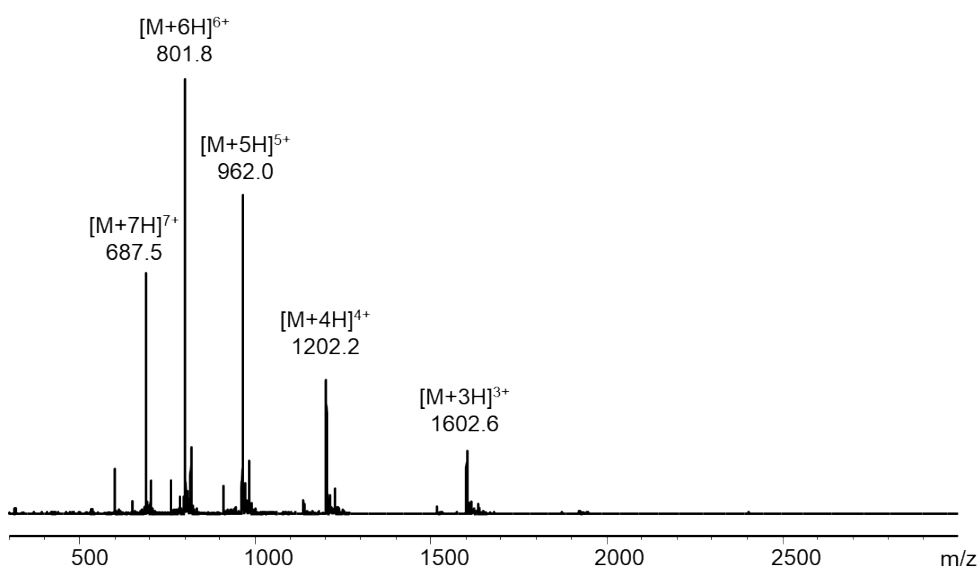
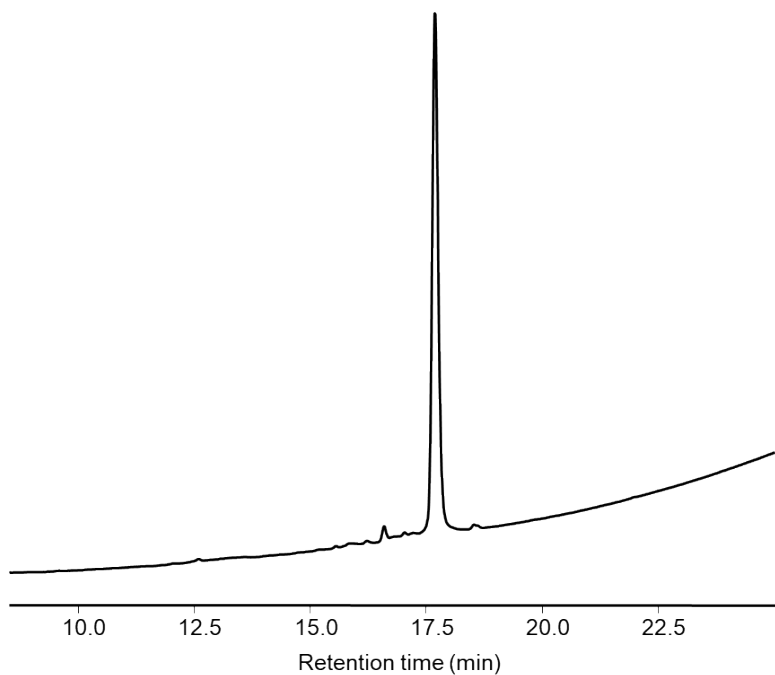
Ac-VVC{Trt-[K(Me₃)]₅}VV-NH₂



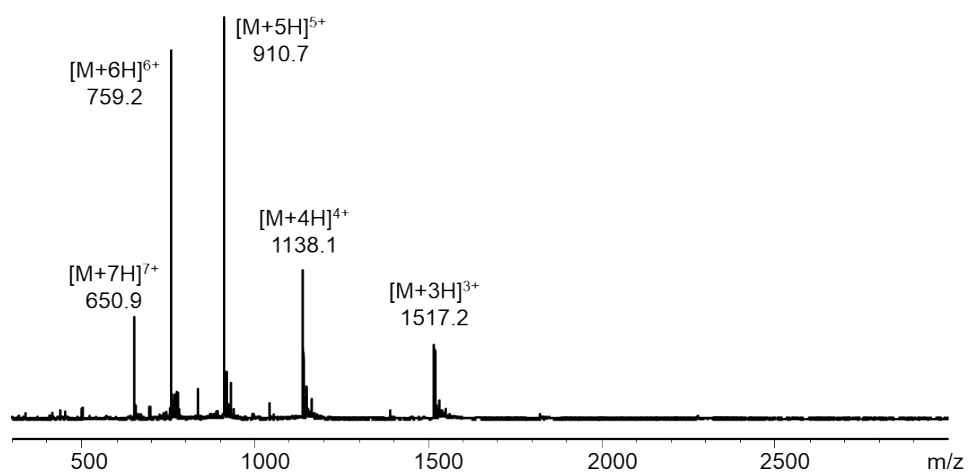
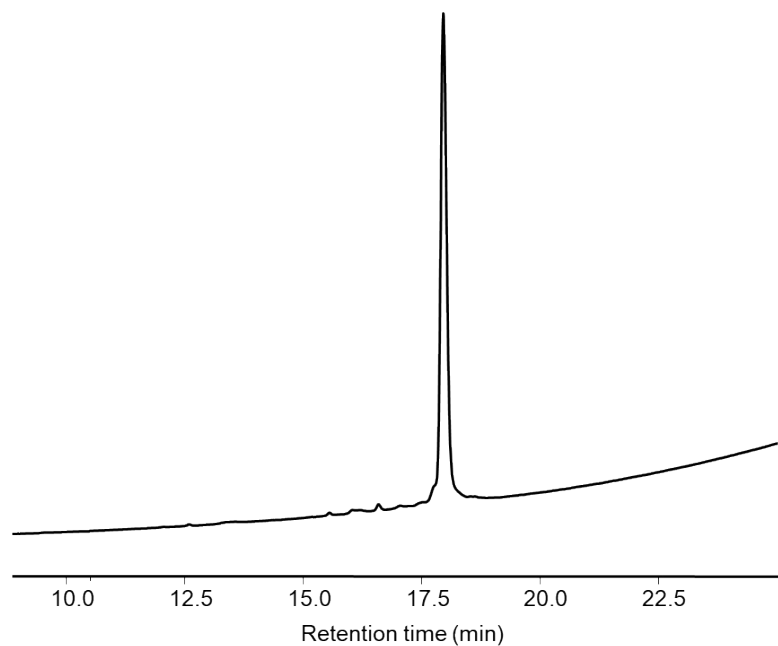
Ac-VVC{Trt-[C(O₃H)]₅G}VV-NH₂



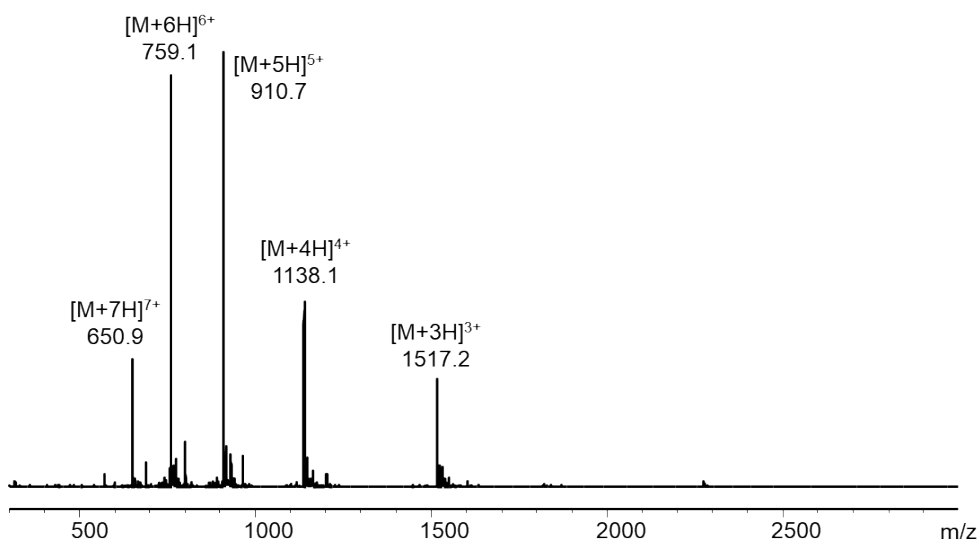
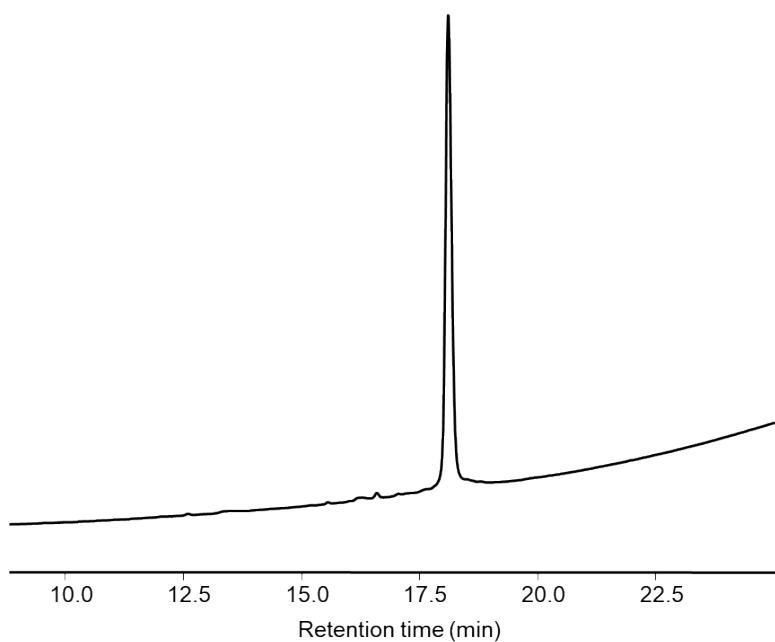
STGC(Trt-K₁₀)ILLGGLFIYDVFWVFGTNNMVTVAKS-NH₂ = SPP4-Trt-K₁₀



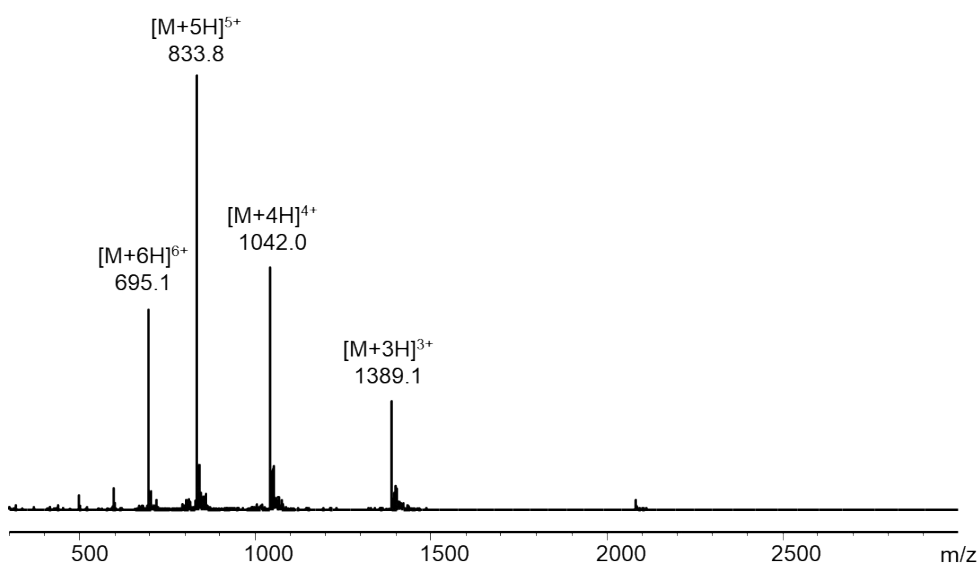
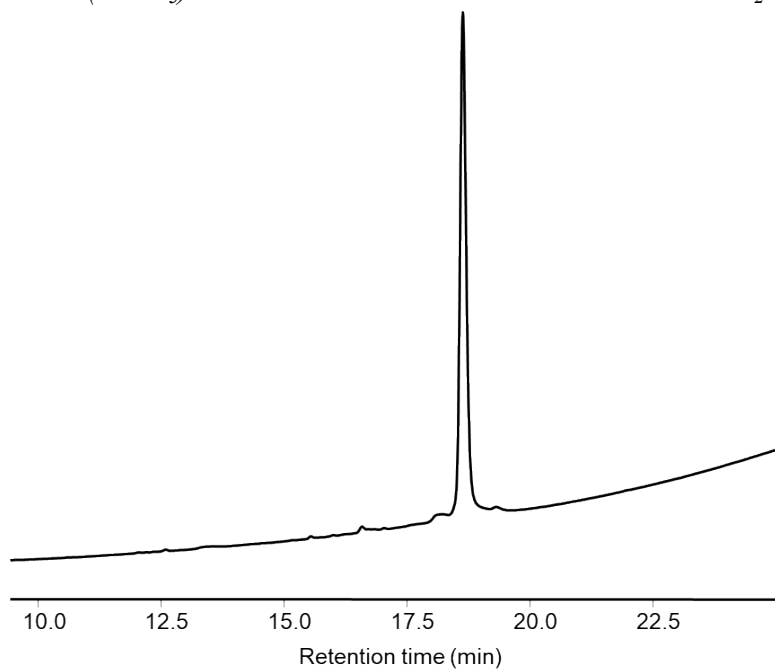
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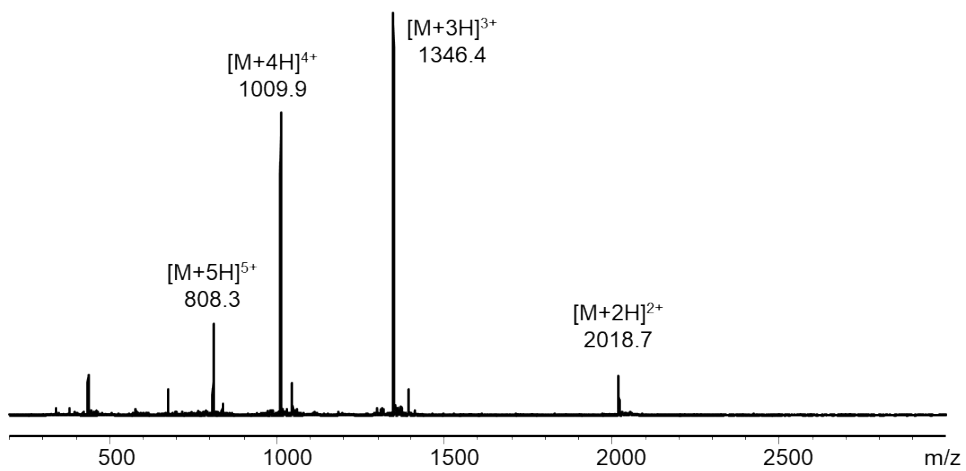
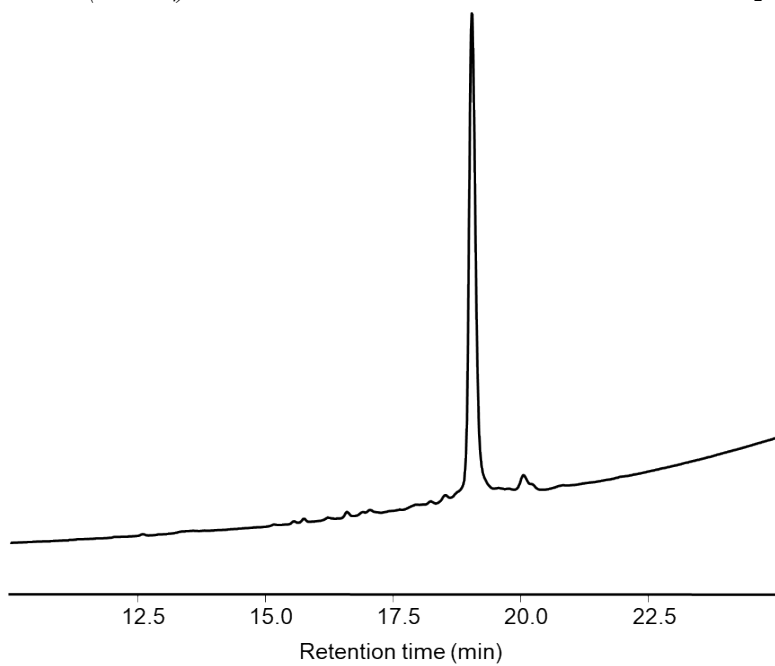
STGC(Trt-branched K_8)*ILLGGLFIYDVFVWVFGTNNMVTVAKS-NH₂* = *SPP4-Trt-branched K₈*



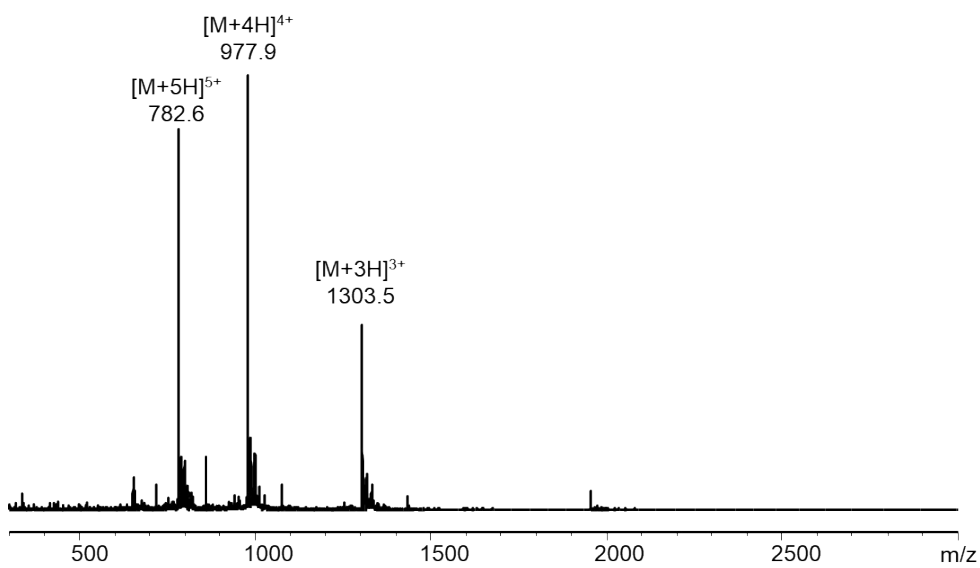
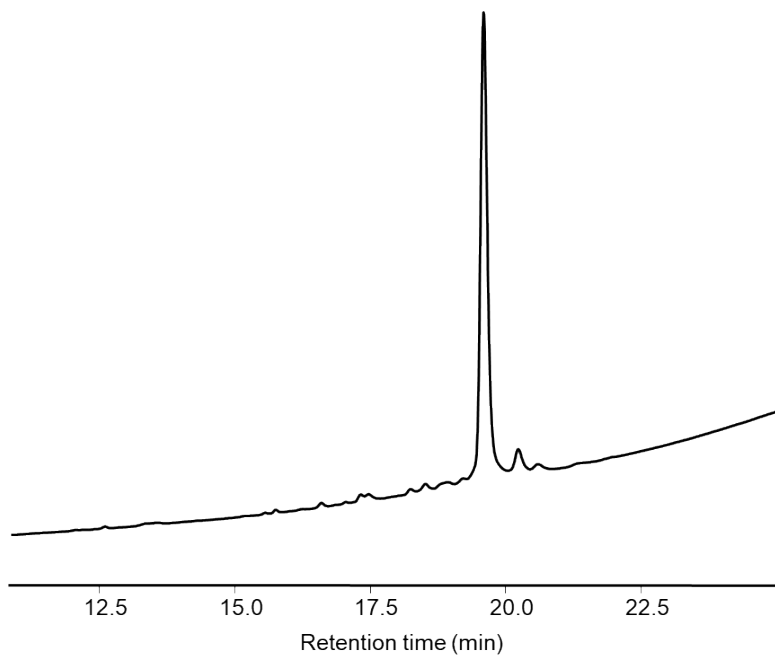
STGC(Trt-K₅)ILLGGLFIYDVFVWVFGTNNMVTVAKS-NH₂ = SPP4-Trt-K₅



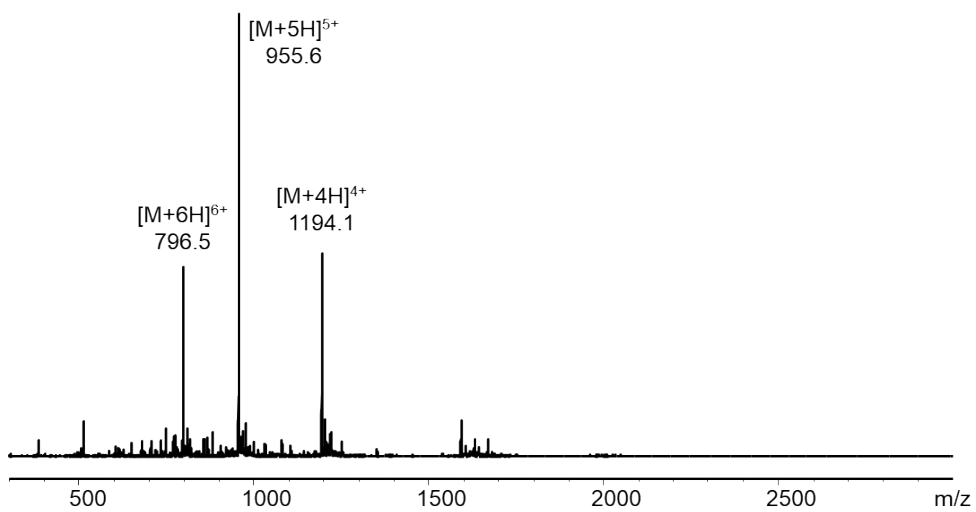
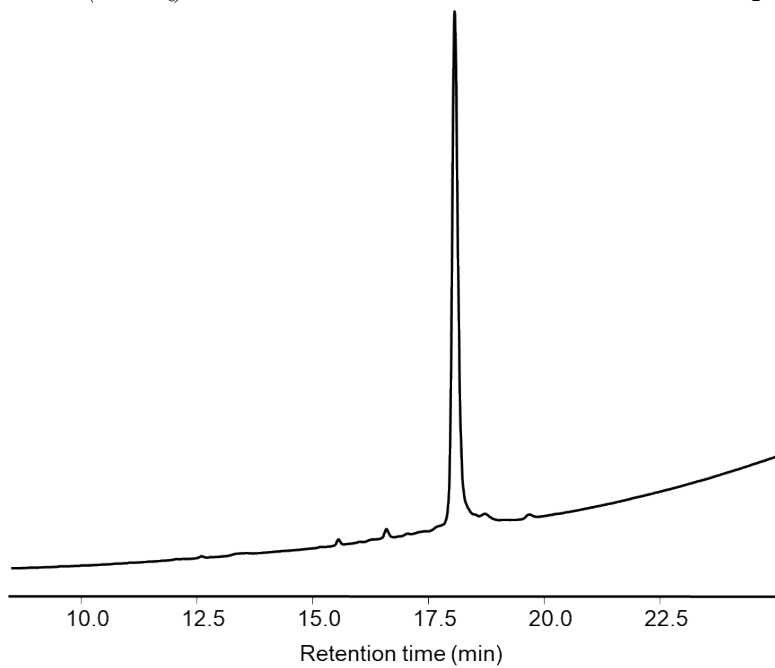
STGC(Trt-K₄)ILLGGLFIYDVFVWFVGTNVMVTVAKS-NH₂ = SPP4-Trt-K₄



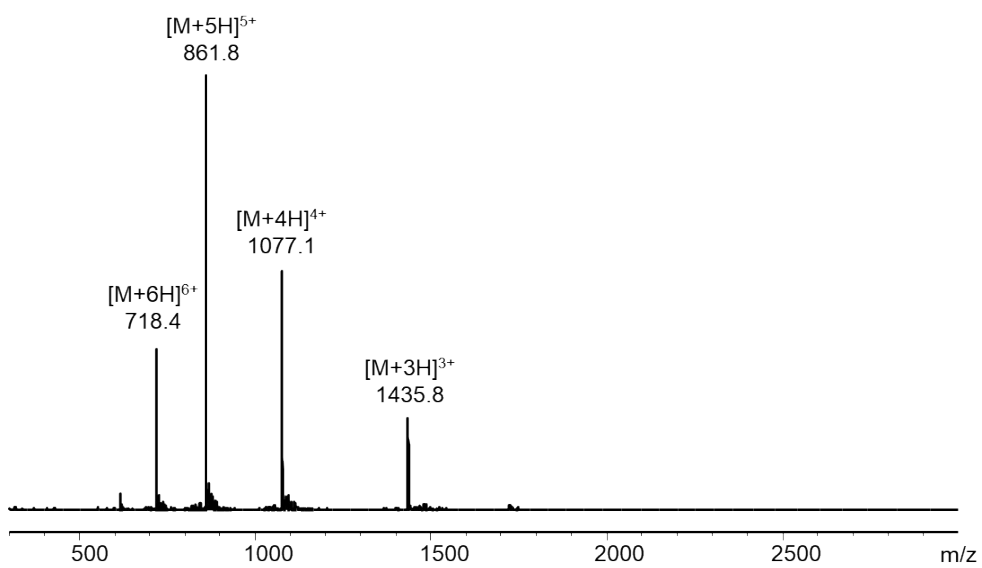
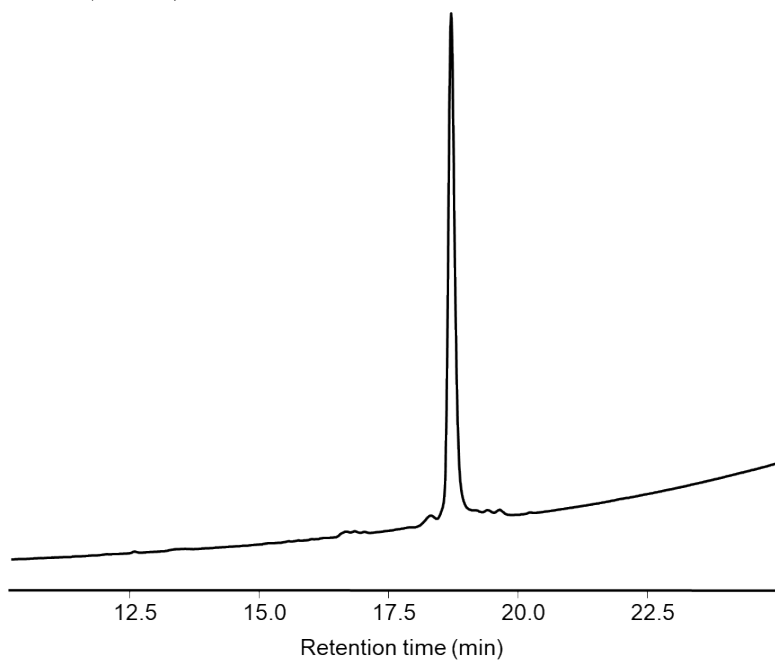
STGC(Trt-K₃)ILLGGLFIYDVFVWVFGTNNMVTVAKS-NH₂ = SPP4-Trt-K₃



STGC(Trt-R₈)ILLGGLFIYDVFVWFVGTNVMVTVAKS-NH₂ = SPP4-Trt-R₈



STGC(Trt-R₅)ILLGGLFIYDVFVWVFGTNNMVTVAKS-NH₂ = SPP4-Trt-R₅



STGC(Trt-R₃)ILLGGLFIYDVFVWFVGTNVMVTVAKS-NH₂ = SPP4-Trt-R₃

