pharmaceutics

Supplementary Materials: Synthesis and Ex Vivo Trans-Corneal Permeation of Penetratin Analogues as Ophthalmic Carriers: Preliminary Results

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Table S1. Analytical data of synthesized peptides.

Peptide	Sequence	HPLC	ESI-MS		
		k'[a]	Precursor ion (m/z)[b]	Product ion (m/z)	z
PNT	FAM-RQIKIWFQNRRMKWKK	12.89	2604.61	868.83 651.85 521.69	3 4 5
PNT-GG	FAM-GG-RQIKIWFQNRRMKWKK	7.33	2718.18	906.82 680.36 544.48	3 4 5
PNT-GG 1	FAM-GG-NRRMKWKK	9.02	1617.85	809.35 539.89 405.17	2 3 4
PNT-GG 2	FAM-GG-FQNRRMKW	8.05	1636.80	818.84 546.22	2 3
PNT-GG 3	FAM-GG-IWFQNRRM	7.87	1621.79	811.31 541.21	2 3
PNT-GG 4	FAM-GG-IKIWFQNR	11.51	1575.74	788.26 525.85	2 3
PNT-GG 5	FAM-GG-RQIKIWFQ	9.06	1589.77	1590.20	1
PNT-R	FAM-GG-KKWKMRRNQFWIKIQR	7.31	2718.18	906.70 680.70 544.40	3 4 5
PNT-R 1	FAM-GG-QFWIKIQR	9.10	1589.01	1590.22 796.13	1 2
PNT-R 2	FAM-GG-RNQFWIKI	11.45	1575.68	1575.62 789.08	1 2
PNT-R 3	FAM-GG-MRRNQFWI	7.84	1622.75	1622.72 812.21	1 2
PNT-R 4	FAM-GG-WKMRRNQF	8.01	1636.81	819.20	2
PNT-R 5	FAM-GG-KKWKMRRN	8.99	1617.85	809.23 540.01 405.22	2 3 4
PNT-R-FL	FL-GG-KKWKMRRNQFWIKIQR	12.48	2673.65	1337.60 892.10	2 3
PNT-R 4-FL **PNT-R-4-FL 4**	FL-GG-WKMRRNQF	6.77	1592.96	1593.23	1

[a] k'=[(peptide retention time-solvent retention time)/solvent retention time]. [b] calculated.

Table S2. Range of calibration curves, RSD% (relative standard deviation %) and ER% (relative error %).

Peptide	Linearity range (nM)	RSD%	ER%
PNT	10-100	5	10
PNT-GG	10-100	10	15
PNT-GG 1	100-500	10	15
PNT-GG 2	5-100	10	15
PNT-GG 3	1-100	5	5
PNT-GG 4	10-100	10	15
PNT-GG 5	5-100	10	15
PNT-R	25-100	10	15
PNT-R 1	10-100	10	15
PNT-R 2	10-50	10	15
PNT-R 3	0.5-5	10	15
PNT-R 4	5-100	10	10
PNT-R 5	0.5-25	10	15

Supplementary figures of Mass spectrometry and HPLC of peptides used in the study

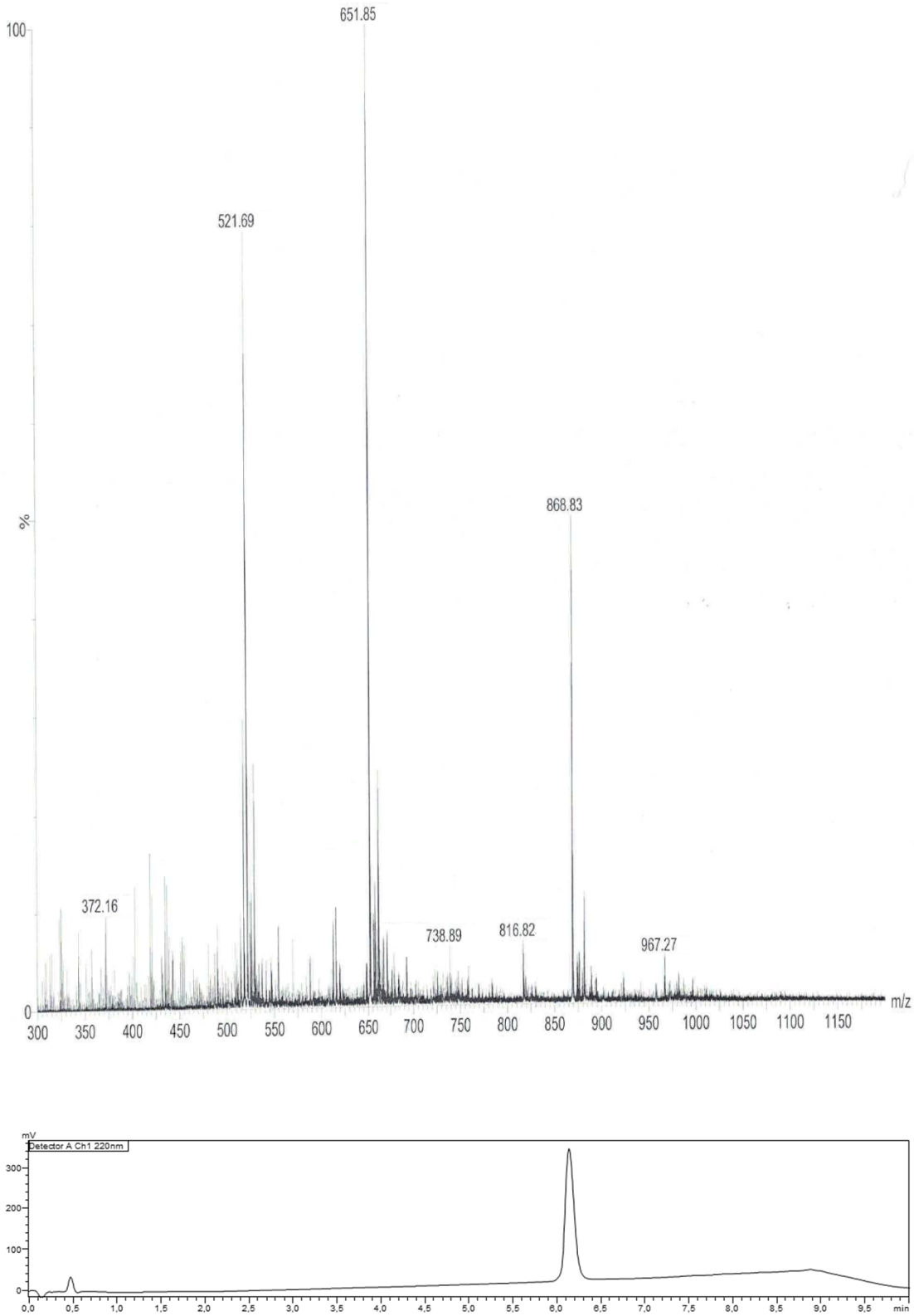

Figure S1. ESI-MS of PNT and analytical HPLC trace at 220 nm.

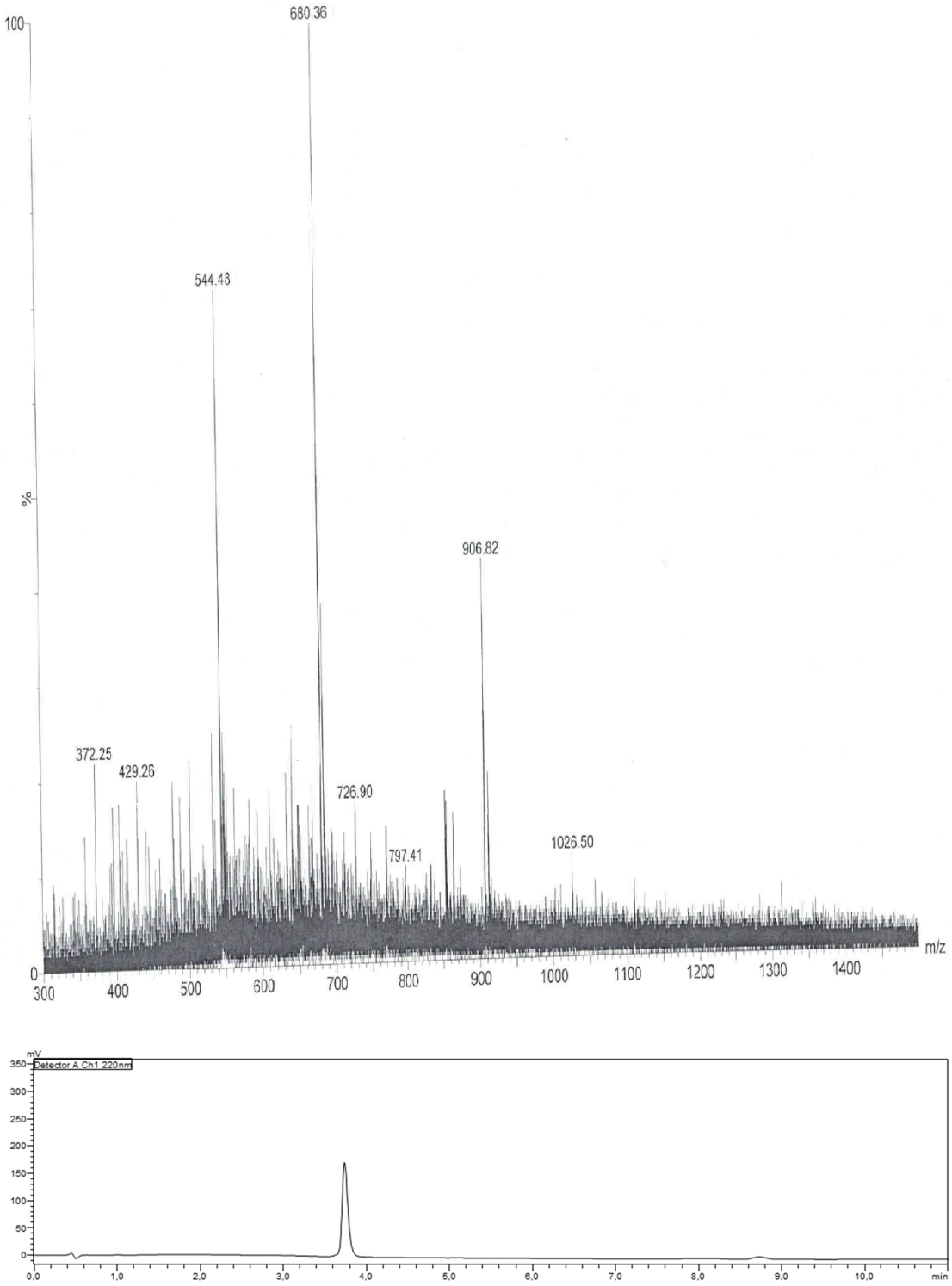

Figure S2. ESI-MS of PNT-GG and analytical HPLC trace at 220 nm.

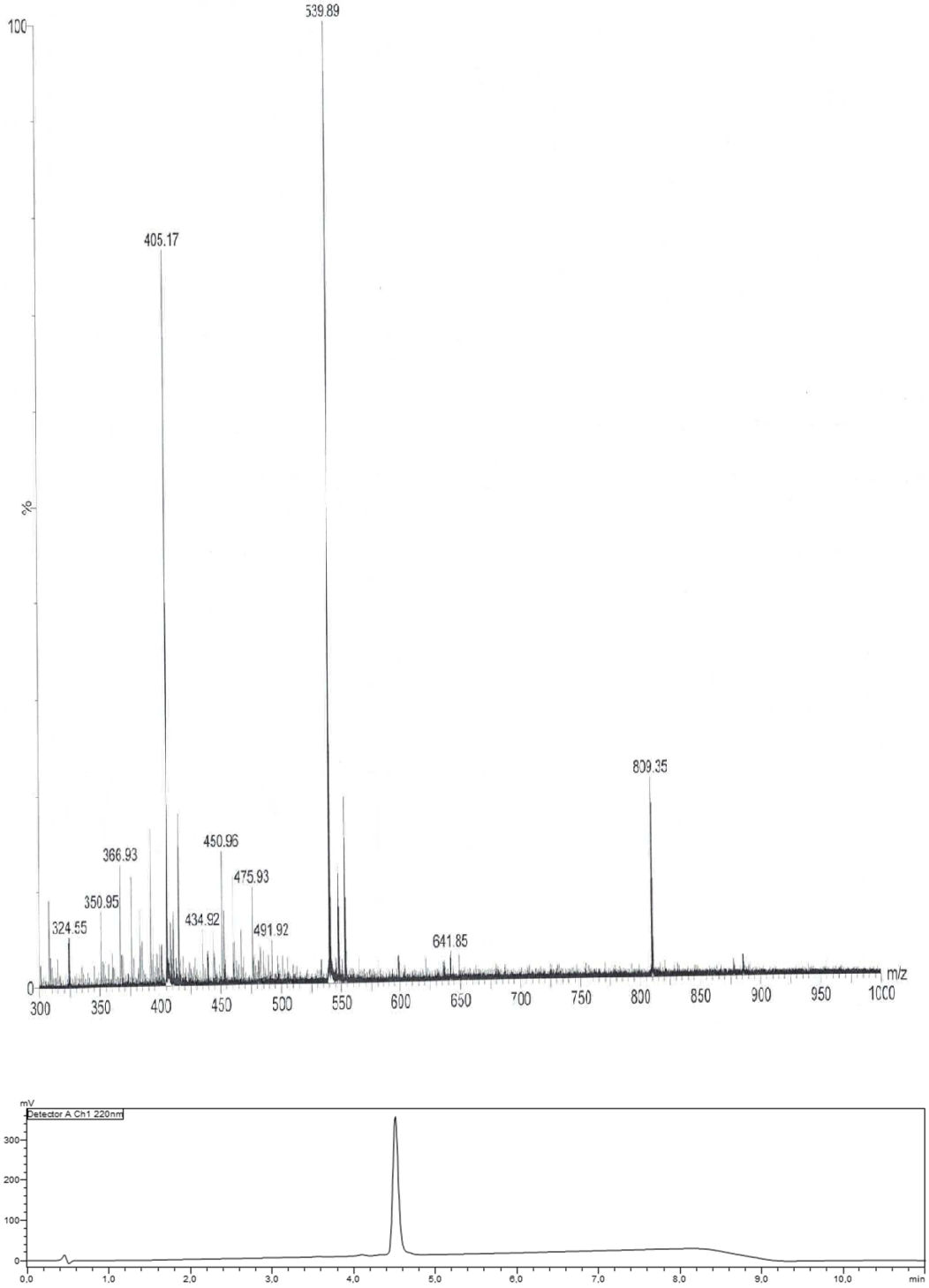

Figure S3. ESI-MS of PNT-GG 1 and analytical HPLC trace at 220 nm.

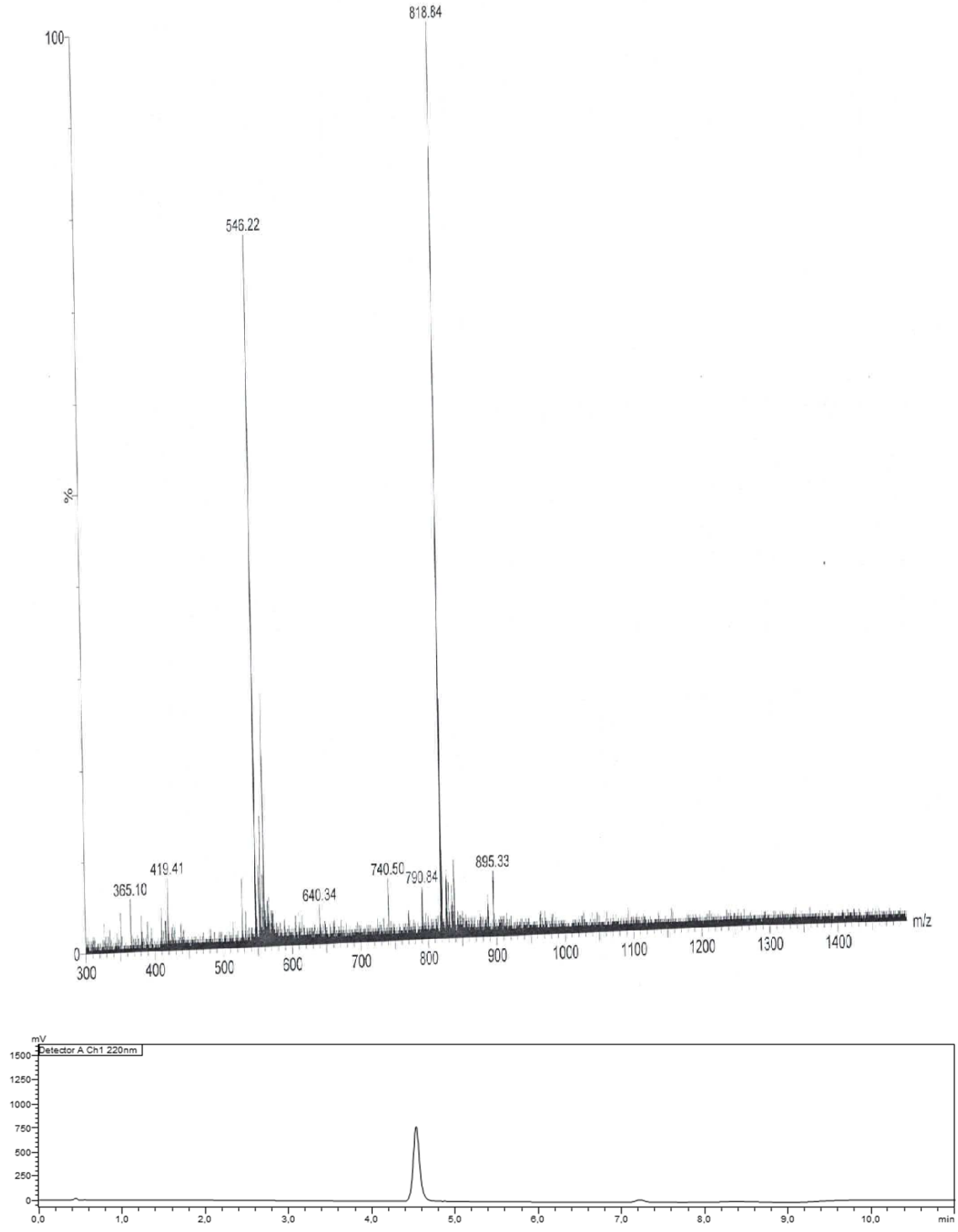

Figure S4. ESI-MS of PNT-GG 2 and analytical HPLC trace at 220 nm.

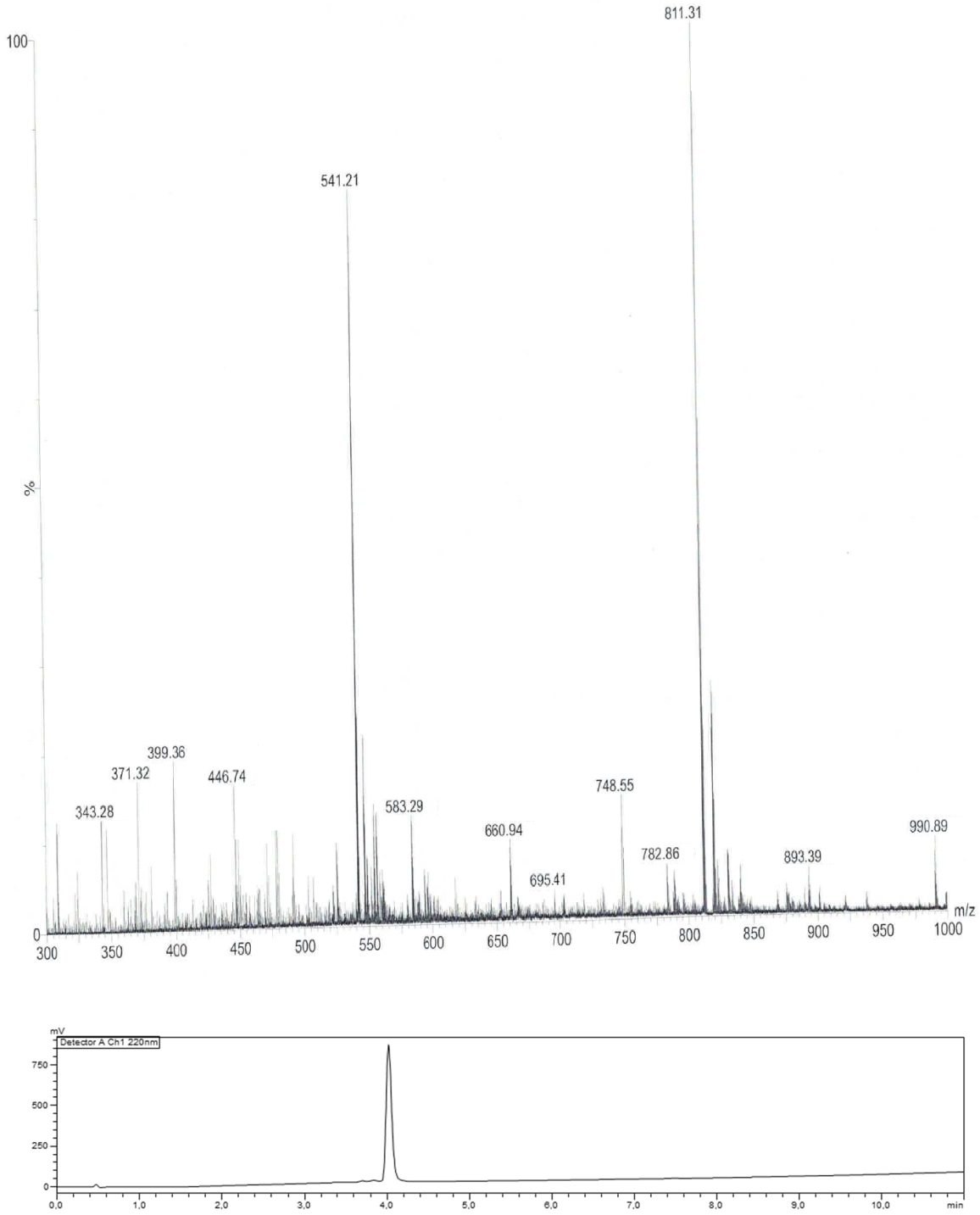

Figure S5. ESI-MS of PNT-GG 3 and analytical HPLC trace at 220 nm.

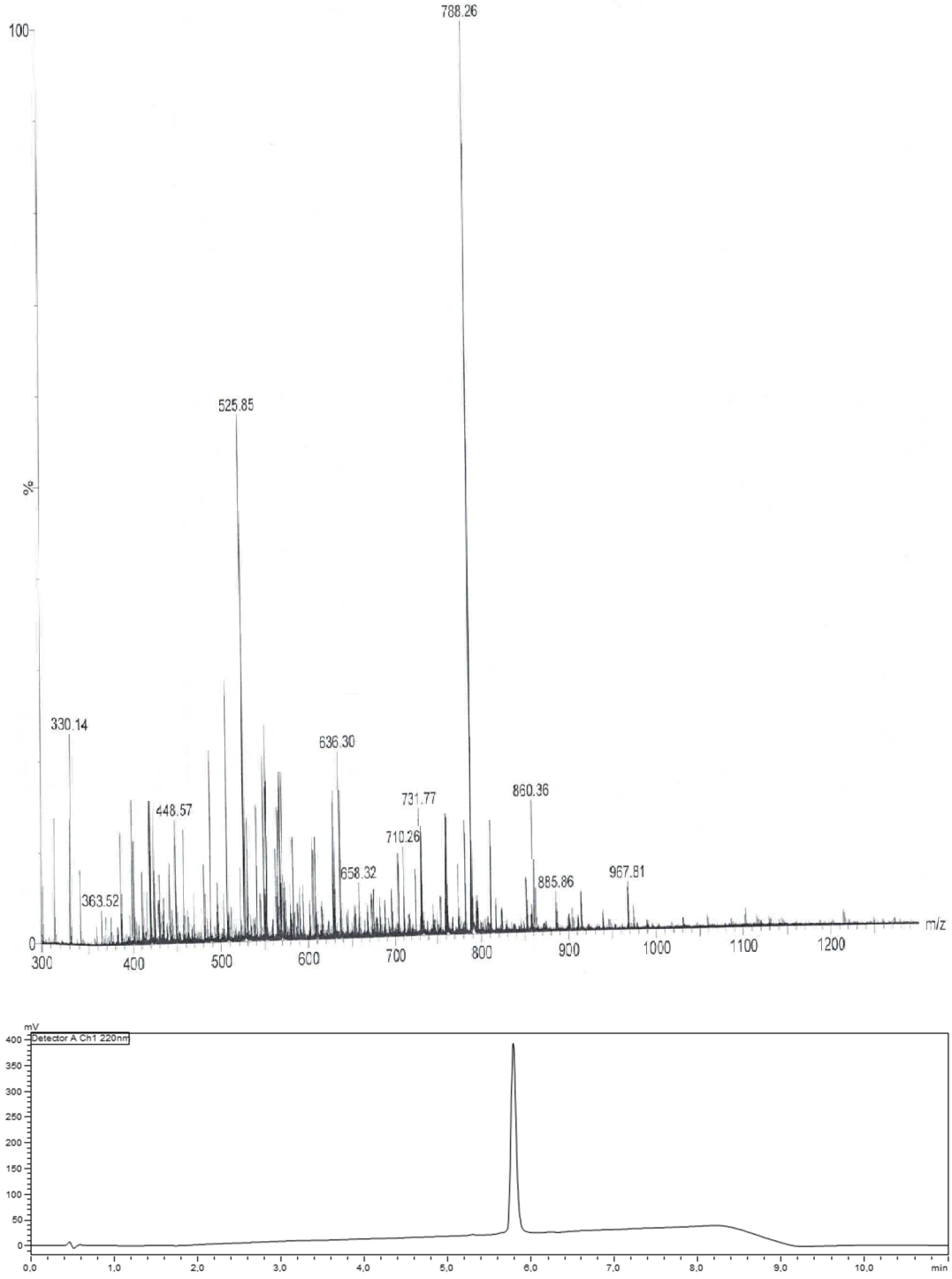

Figure S6. ESI-MS of PNT-GG 4 and analytical HPLC trace at 220 nm.

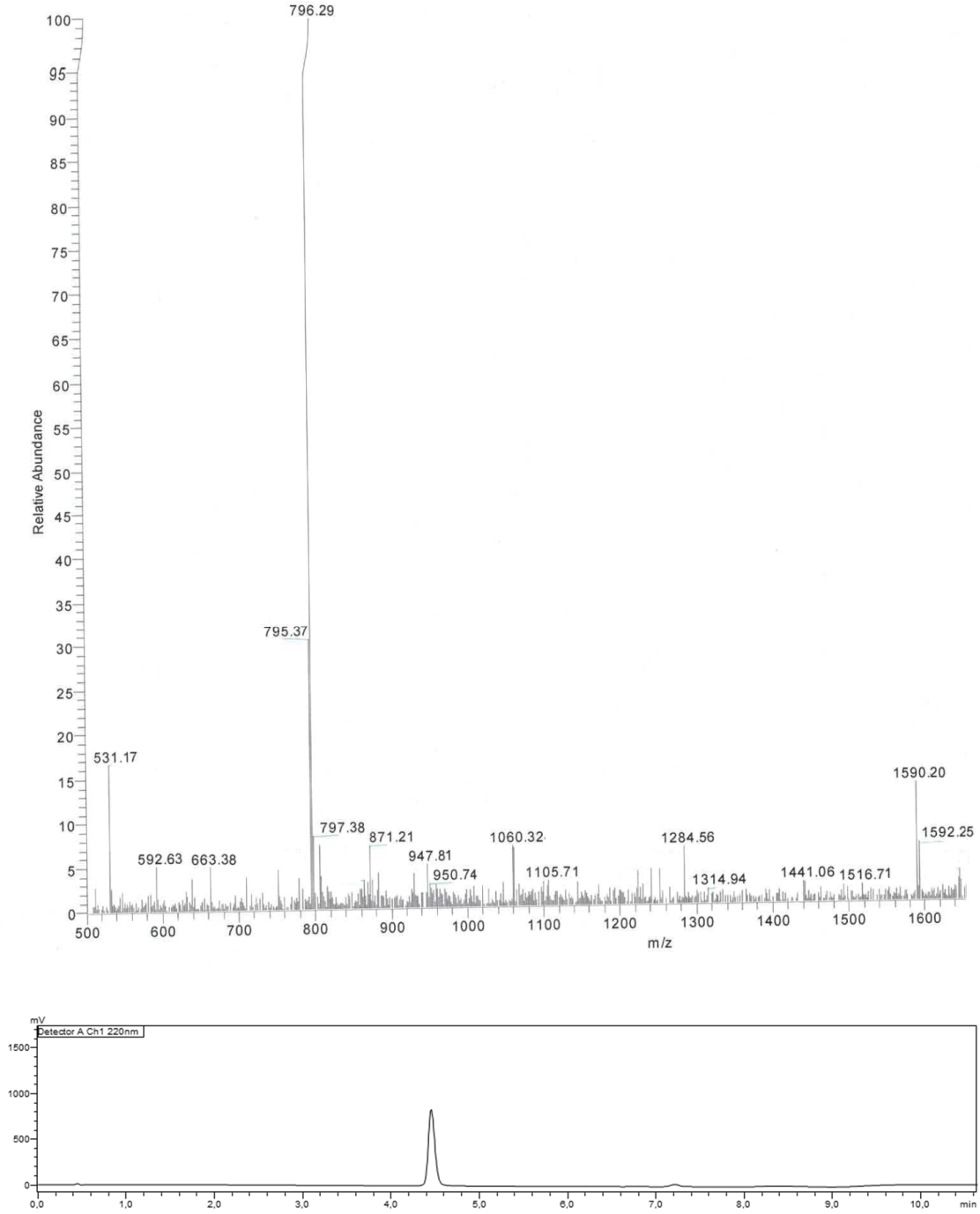

Figure S7. ESI-MS of PNT-GG 5 and analytical HPLC trace at 220 nm.

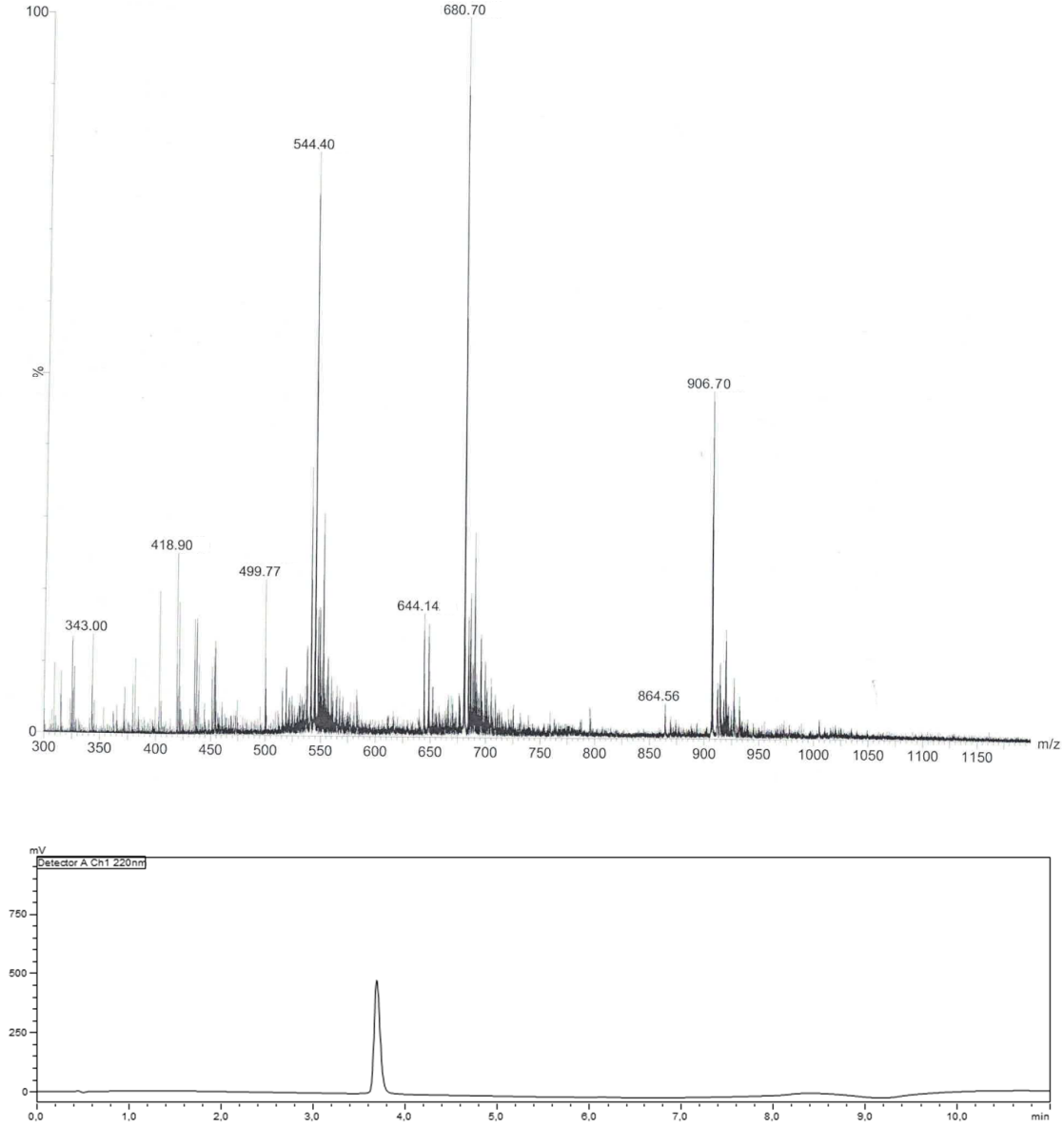

Figure S8. ESI-MS of PNT-R and analytical HPLC trace at 220 nm.

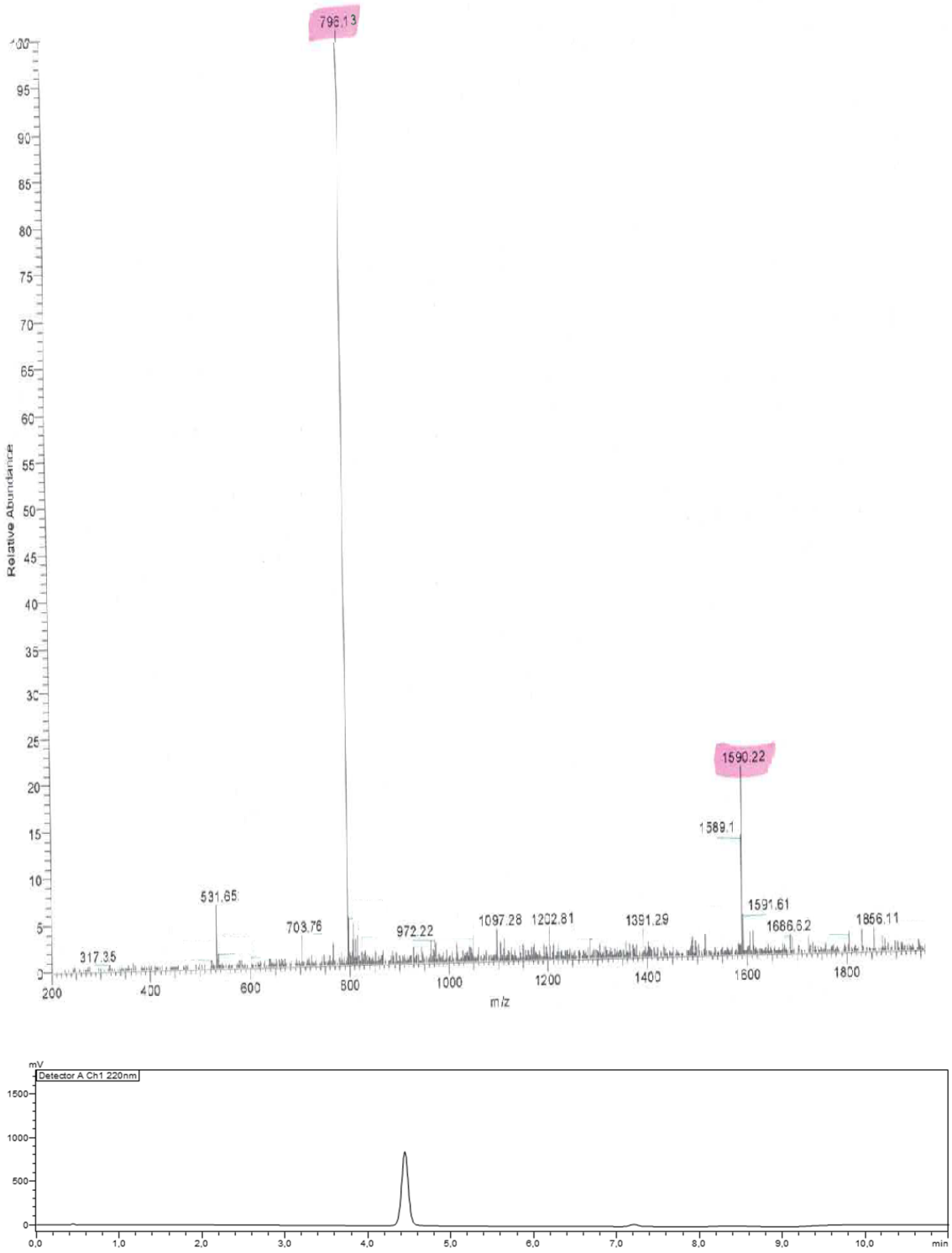

Figure S9. ESI-MS of PNT-R 1 and analytical HPLC trace at 220 nm.

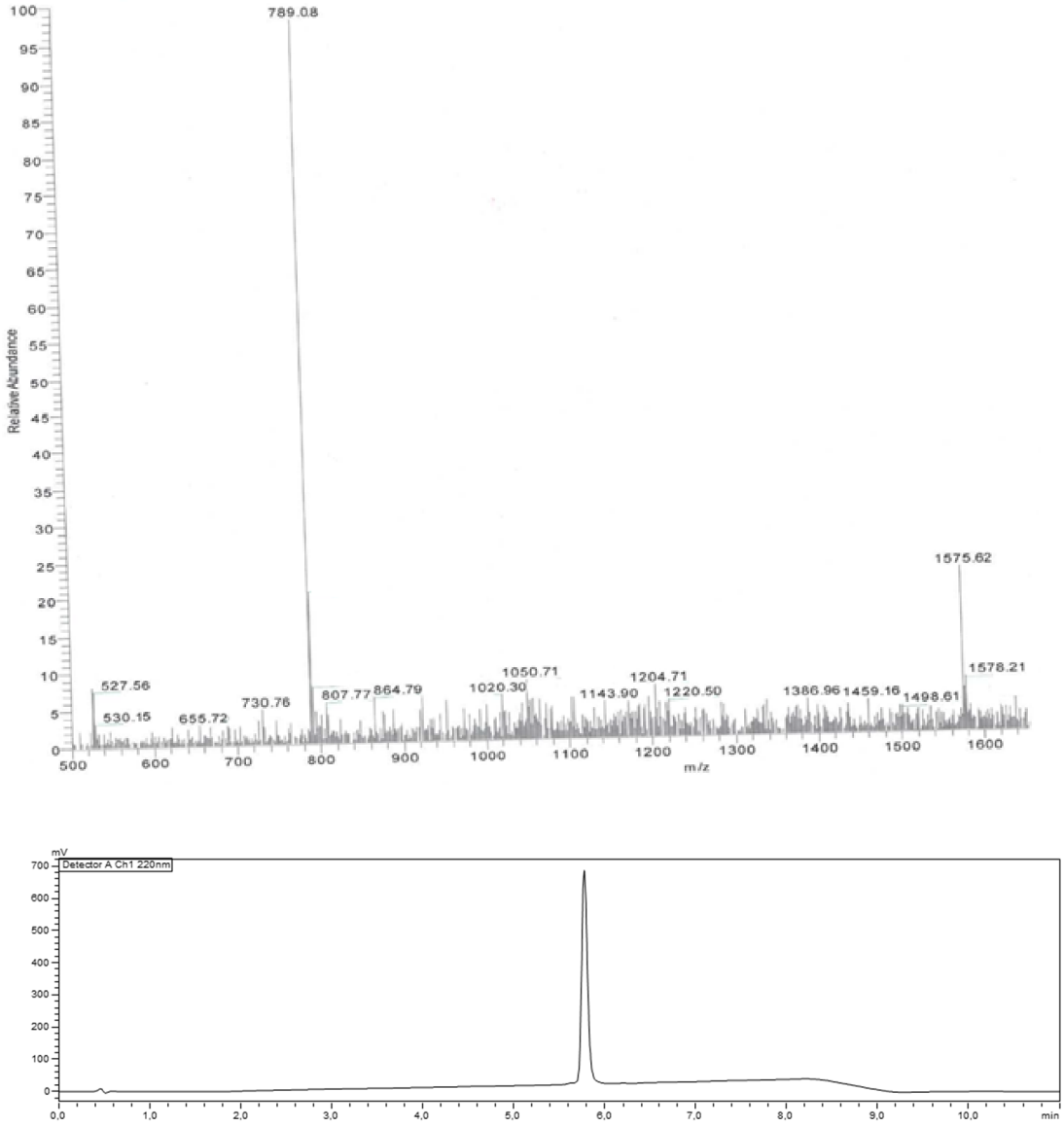

Figure S10. ESI-MS of PNT-R 2 and analytical HPLC trace at 220 nm.

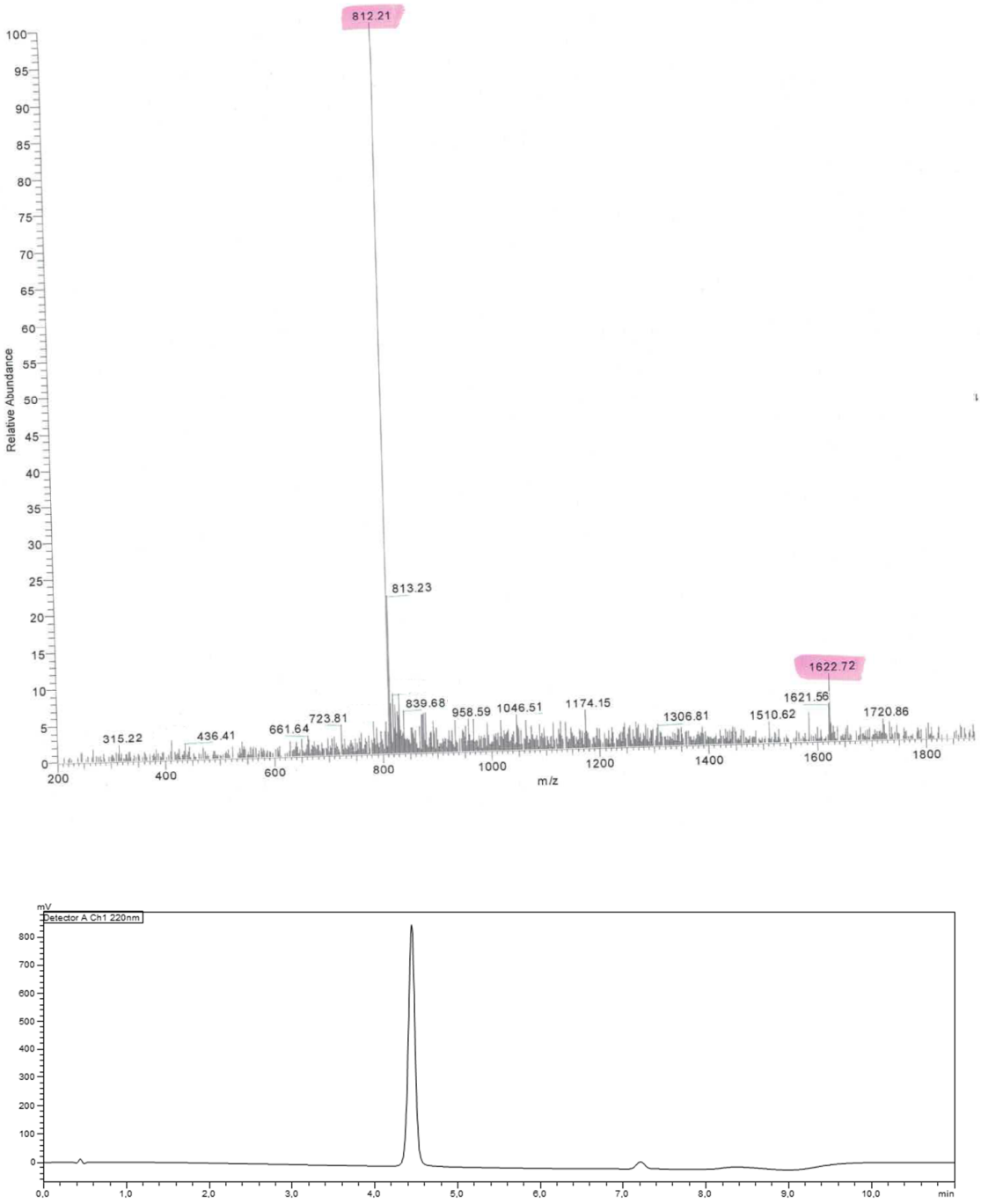

Figure S11. ESI-MS of PNT-R 3 and analytical HPLC trace at 220 nm.

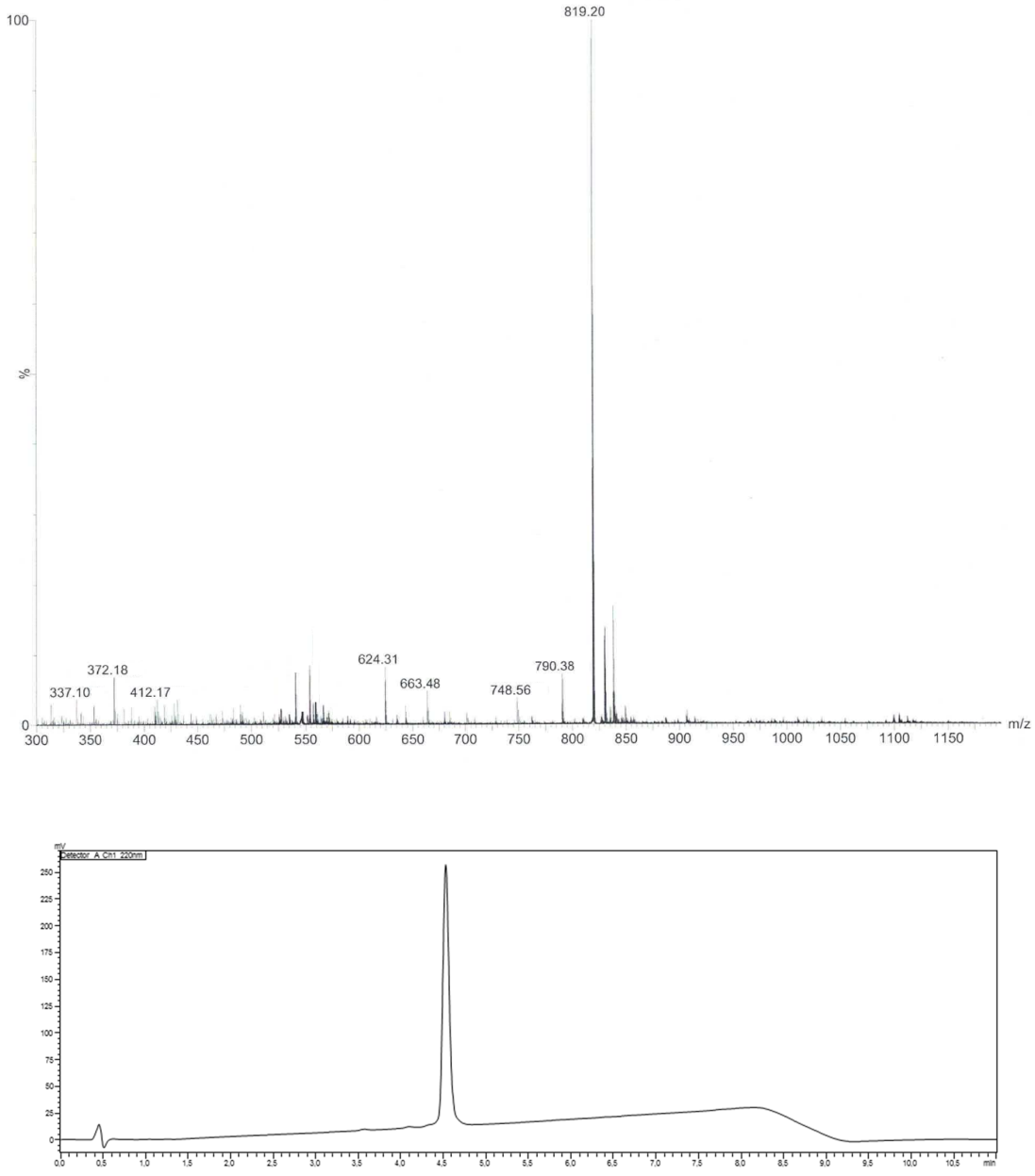

Figure S12. ESI-MS of PNT-R 4 and analytical HPLC trace at 220 nm.

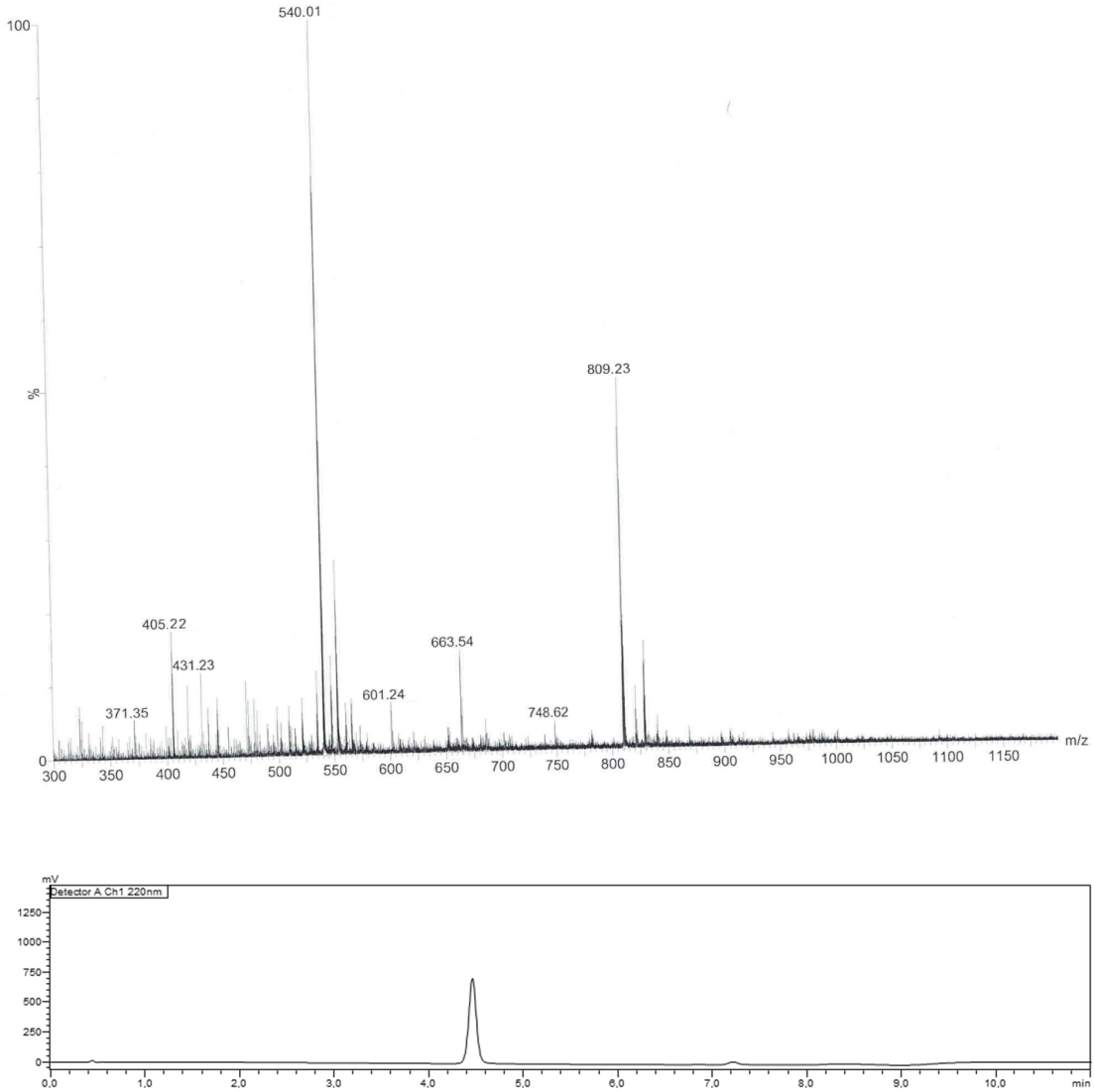

Figure S13. ESI-MS of PNT-R 5 and analytical HPLC trace at 220 nm.

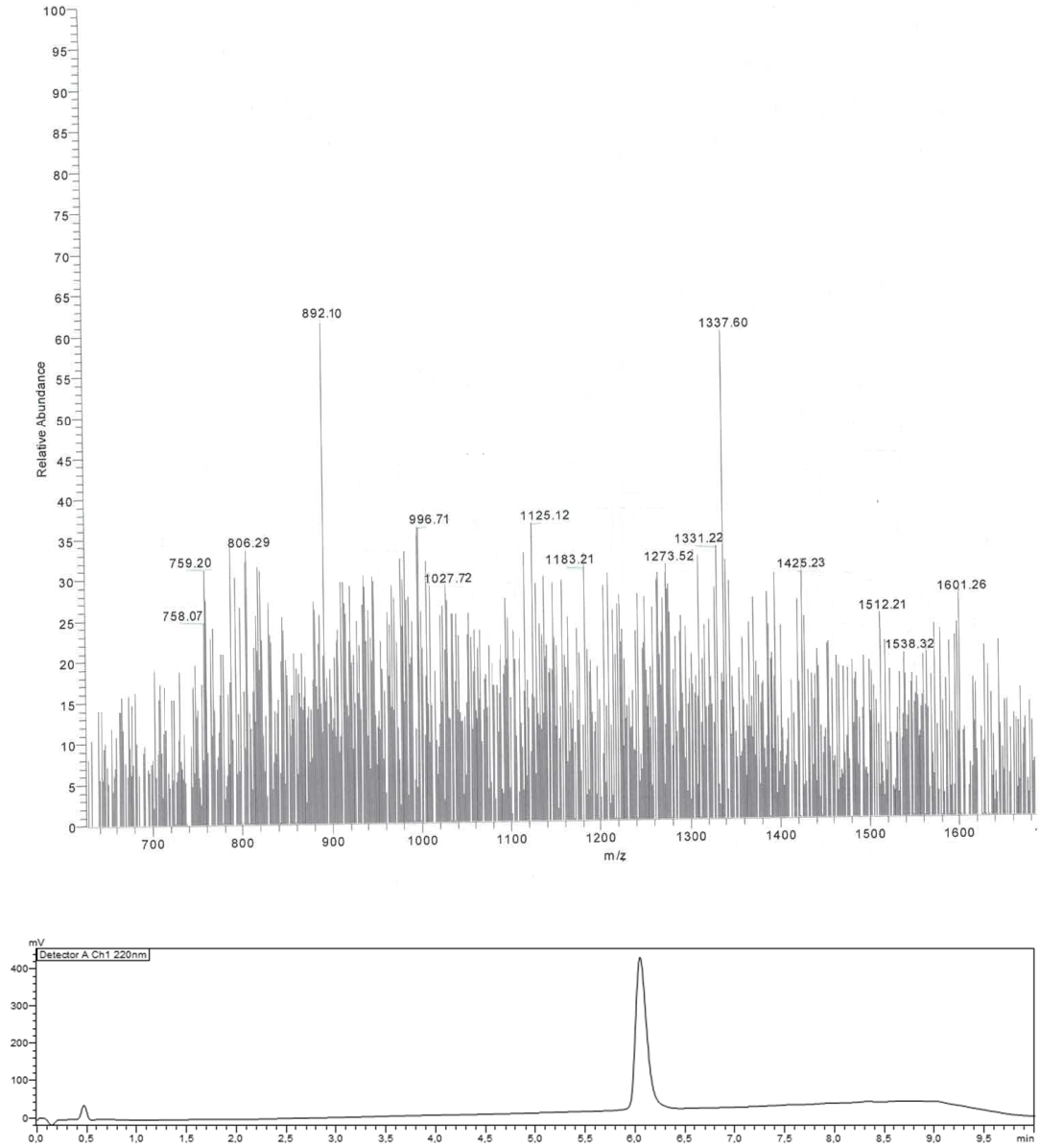

Figure S14. ESI-MS of PNT-R-FL and analytical HPLC trace at 220 nm.

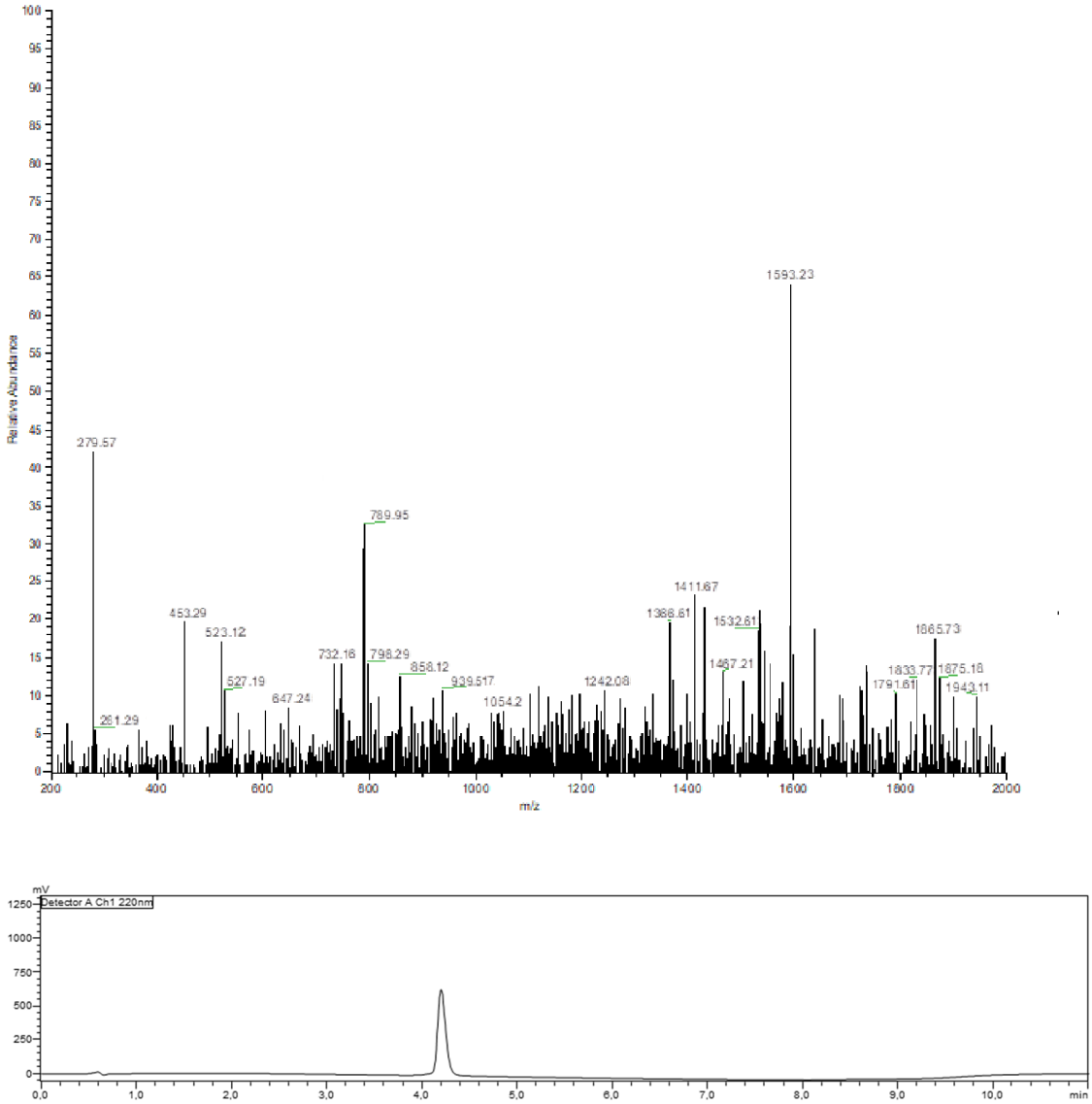

Figure S15. ESI-MS of PNT-R 4-FL and analytical HPLC trace at 220 nm.