

MS and HPLC analysis

Peptides:

- 1) Citropin 1.1
- 2) Pal-KK-NH₂
- 3) Pal-RR-NH₂
- 4) Pexiganan
- 5) Temporin A

Mass spectrometry

Equipment: Waters, ACQUITY QDa mass detector.

Range: 50-1250 m/z.

Positive scan, Cone voltage 15V, Sampling rate - 2 points/sec, capillary voltage 1.0 kV.

HPLC analysis

Equipment: Varian ProStar HPLC system,

Phenomenex, Luna[®] C18(2) column (100x3 mm, 5 μm, 100Å).

Mobile phase: Acetonitrile and water both containing 0.1 % of TFA (v/v).

Method: gradient of acetonitrile – 10-100% in 15 minutes. The data were collected for 16 min.

Detection: UV-Vis detector; absorbance at 214 nm.

Results

A\ MS analysis

A1: Citropin 1.1

Monoisotopic mass of the Citropin 1.1 is 1613.987 Da.

Table 1. Citropin 1.1.

z	Calculated m/z	Measured m/z
1	1614.99	-
2	808.00	808.72
3	539.00	539.60

A2: Pal-KK-NH₂

Monoisotopic mass of the Pal-KK-NH₂ is 511.44614 Da.

Table 2. Pal-KK-NH₂.

z	Calculated m/z	Measured m/z
1	512.45	512.63
2	256.73	-

Measured value of 1025.01 m/z refers to dimer – [2M+2H]²⁺ (calculated value is 1024.91).

A3: Pal-RR-NH₂

Monoisotopic mass of the Pal-RR-NH₂ is 567.458 Da.

Table 3. Pal-RR-NH₂.

z	Calculated m/z	Measured m/z
1	568.47	568.63
2	284.74	285.02

A4: Pexiganan

Monoisotopic mass of the Pexiganan is 2475.630 Da.

Table 4. Pexiganan.

z	Calculated m/z	Measured m/z
1	2476,64	-
2	1238,82	1239.48
3	826,22	826.85
4	619,92	620.70
5	496,13	496.70
6	413,61	414.23
7	354,67	-
8	310,46	-
9	276,08	-
10	248,57	-

A5: Temporin A

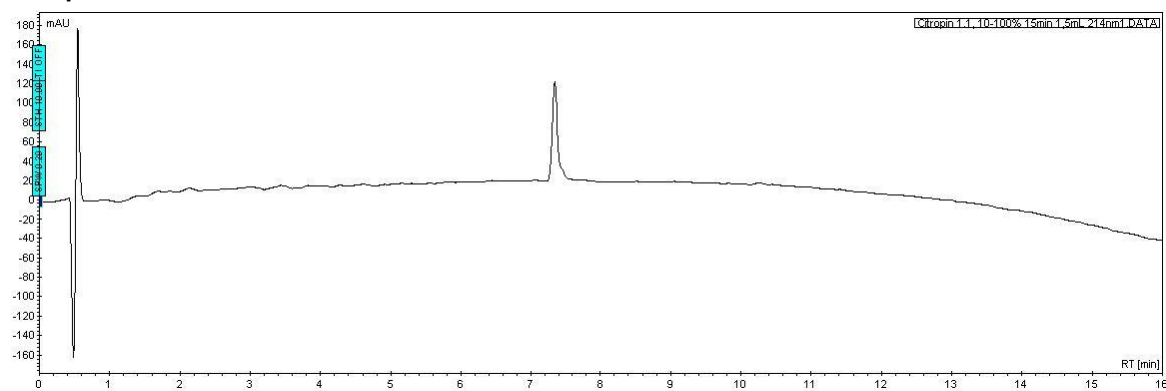
Monoisotopic mass of the Temporin A is 1395.900 Da.

Table 5. Temporin A.

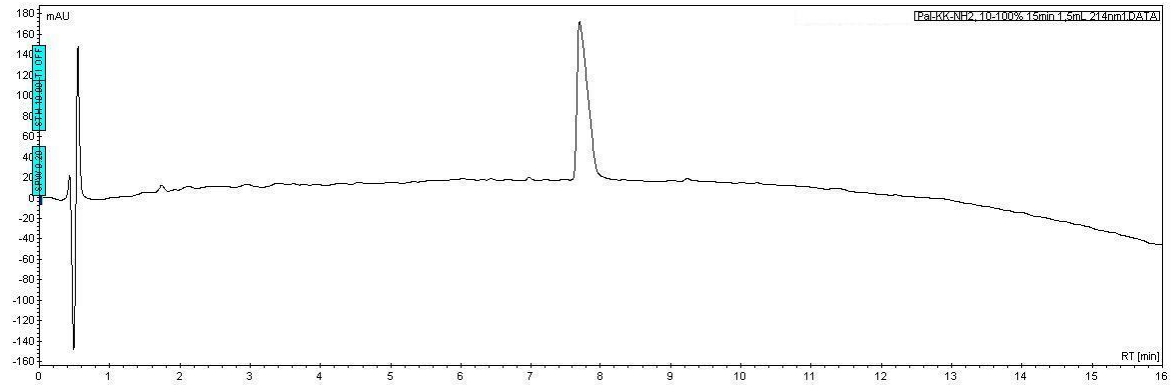
z	Calculated m/z	Measured m/z
1	1396,90	-
2	698,96	699.51

B\ HPLC analysis

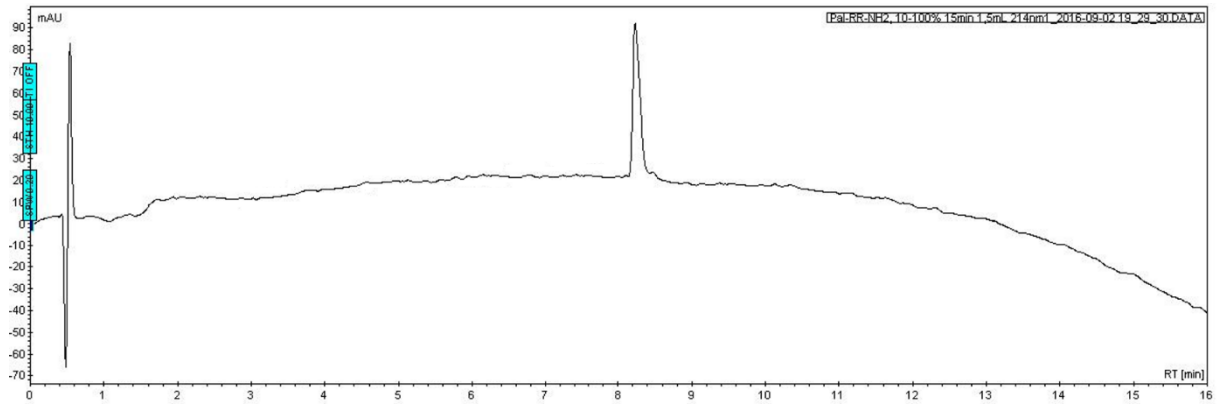
B1: Citropin 1.1



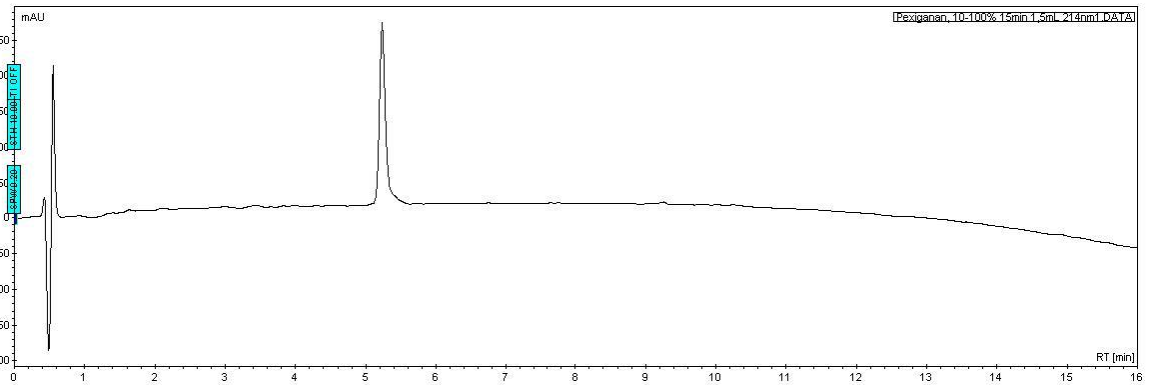
B2: Pal-KK-NH2



B3: Pal-RR-NH2



B4: Pexiganan



B5: Temporin A

