

## CERTIFICATE OF ANALYSIS

## Product Information

Product Name:	PT-141
Lot No.:	VI1420250802-10
Sequence:	Nle-cyclo(Asp-His-D-Phe-Arg-Trp-Lys)
Modifications:	N-Terminal Acetyl; Cyclo{K and D}

## Quality Control

Test Items	Specifications	Results
Appearance	White to off-white lyophilized powder	Conforms
Molecular Weight (MS)	1025.19±1.0 Da	1024.80 Da
Purity by HPLC	>98%	99.3%
Retention Time (HPLC)	±0.2min of Standard	Conforms
Net Peptide Content	≥10mg	11.5mg
Solubility	10 mg/1ml H <sub>2</sub> O	Clearly soluble
Acetic acid Content	≤20.0%	5.9%
TFA Content	≤0.500%	Conforms
DCM Content	≤0.060%	N.D.
DMF Content	≤0.088%	N.D.
Total Aerobic Count	≤100CFU/g	Conforms
Yeast & Molds Count	≤100CFU/g	Conforms
Endotoxins	≤0.5EU/mg	Conforms

Storage Conditions:	-20°C
Quality Control:	Mike P.
Date of Analysis:	August 2025

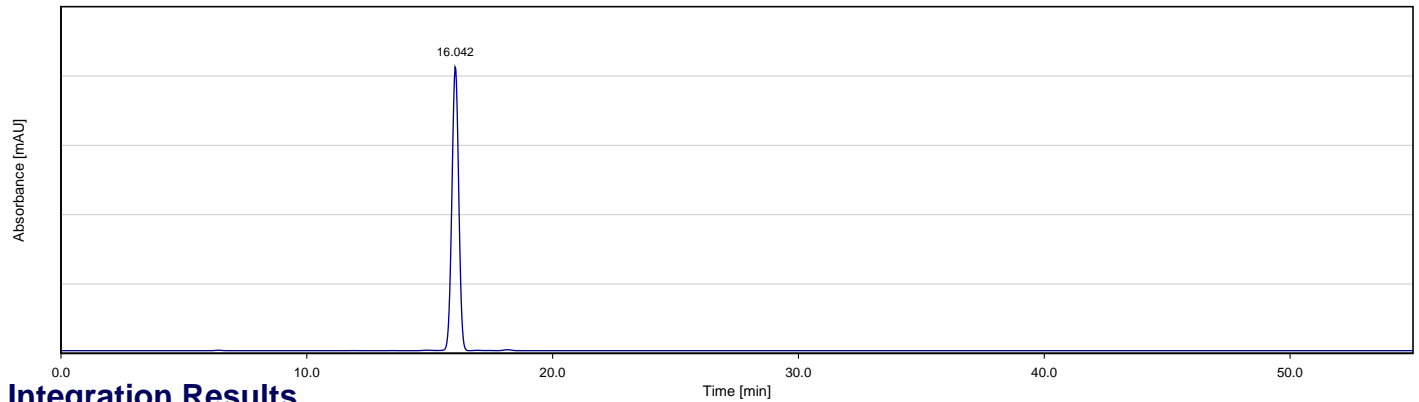
## Sample Information

Lot. No	V11420250802-10
Pump A	0.1% trifluoroacetic in 100% water
Pump B	0.1% trifluoroacetic in 100% acetonitrile
Total Flow	0.8ml/min
Wavelength	220nm
Analytical column type	Phenomenex Luna 3um C18 (2) (4.6*150mm*3um)
Dissolution method	100%H2O
Inj. Volume	4ul

## Gradient Program

Time	Module	Action	Value
0.01	Pumps	B.Conc	20
25.00	Pumps	B.Conc	45
30.00	Pumps	B.Conc	90
40.00	Pumps	B.Conc	90
41.00	Pumps	B.Conc	20
55.00	Controller	Stop	

## Chromatogram

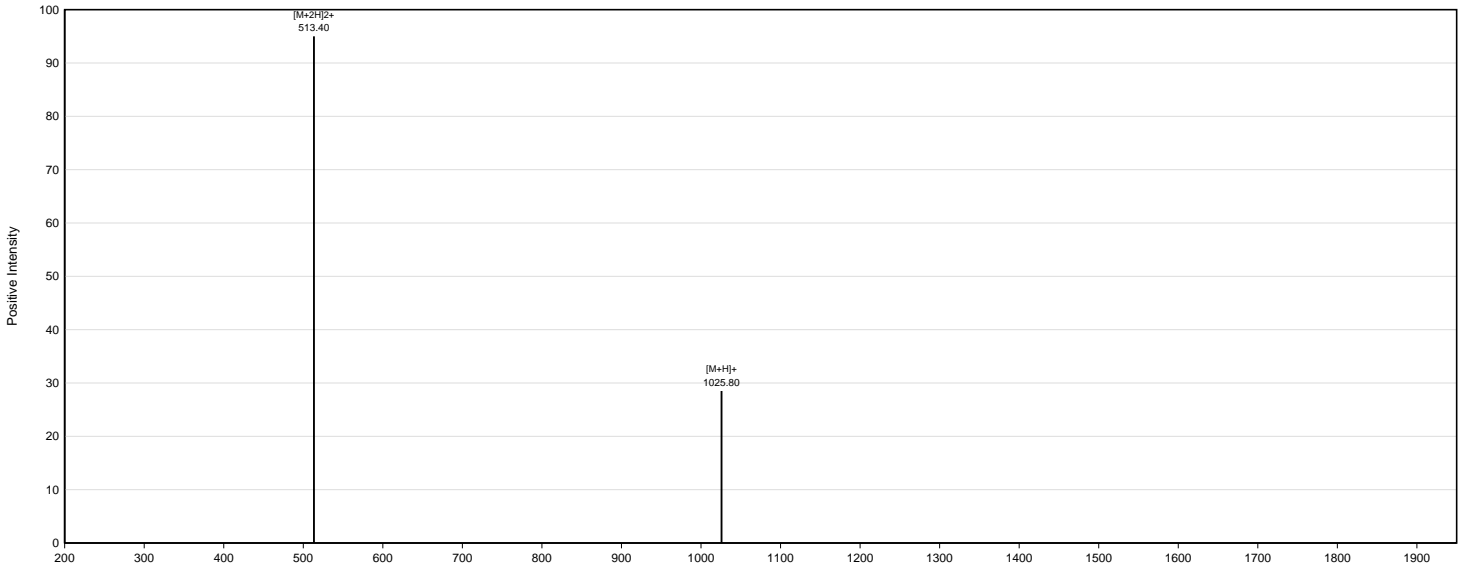


## Integration Results

No.	Ret. Time	Area	Height	Relative Area %	Amount
1	6.407	13677	1693	0.102	n.a.
2	11.934	1857	267	0.014	n.a.
3	13.474	1575	277	0.012	n.a.
4	14.708	1330	223	0.010	n.a.
5	14.837	5545	1055	0.042	n.a.
6	14.997	5847	961	0.044	n.a.
7	15.239	4321	469	0.032	n.a.
8	15.532	6006	882	0.045	n.a.
9	15.699	8398	905	0.063	n.a.
10	16.042	13263791	1108912	99.308	n.a.
11	16.919	8719	1237	0.065	n.a.
12	17.093	1192	246	0.009	n.a.
13	17.385	1500	320	0.011	n.a.
14	17.484	1631	315	0.012	n.a.
15	18.164	30891	3700	0.231	n.a.
<b>Total</b>		<b>13356278</b>	<b>1121463</b>	<b>100.000</b>	<b>n.a.</b>

**Conclusion:** Main peak at RT 16.042 min, purity 99.31% by area

**MS Spectrum**



**Sample Information**

Dissolution method :3%HAC+25%ACN+72%H<sub>2</sub>O  
Injection Volume :1ul

**Interface**

Interface :ESI  
Nebulizing Gas Flow :1.50L/min  
CDL Temp :250C  
CDL Volt :0v  
Block Temp :200

**Prerod Bias**

Prerod Bias :+4.5kv  
Detector :-0.2kv  
T.Flow :0.2ml/min  
B. conc :30%H<sub>2</sub>O/70%MeOH

<b>Lot No.</b>	VI1420250802-10
<b>Theoretical</b>	1025.19
<b>Observed</b>	1024.80