

## CERTIFICATE OF ANALYSIS

## Product Information

Product Name:	MOTS-C
Lot No.:	VI2120251117-10
Sequence:	Met-Arg-Trp-Gln-Glu-Met-Gly-Tyr-Ile-Phe-Tyr-Pro-Arg-Lys-Leu-Arg
Modifications:	N/A

## Quality Control

Test Items	Specifications	Results
Appearance	White to off-white lyophilized powder	Conforms
Molecular Weight (MS)	2174.63±1.0 Da	2174.85 Da
Purity by HPLC	>98%	99.4%
Retention Time (HPLC)	±0.2min of Standard	Conforms
Net Peptide Content	≥10mg	11.7mg
Solubility	10 mg/1ml H2O	Clearly soluble
Acetic acid Content	≤12.0%	4.0%
TFA Content	≤0.500%	Conforms
DCM Content	≤0.060%	N.D.
DMF Content	≤0.088%	0.076%
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:	November 2025

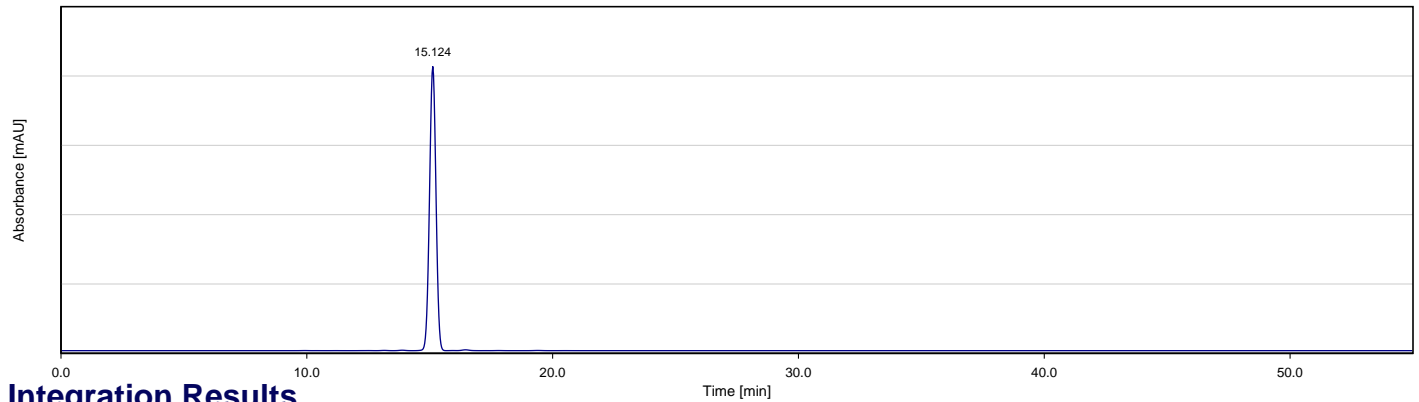
## Sample Information

Lot. No	VI2120251117-10
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	Thermo Scientific Acclaim TM 300 C18 (4.6*150mm*3um)
Dissolution method	100%H2O
Inj. Volume	12ul

## Gradient Program

Time	Module	Action	Value
0.01	Pumps	B.Conc	23
25.00	Pumps	B.Conc	38
30.00	Pumps	B.Conc	90
40.00	Pumps	B.Conc	90
41.00	Pumps	B.Conc	23
55.00	Controller	Stop	

## Chromatogram

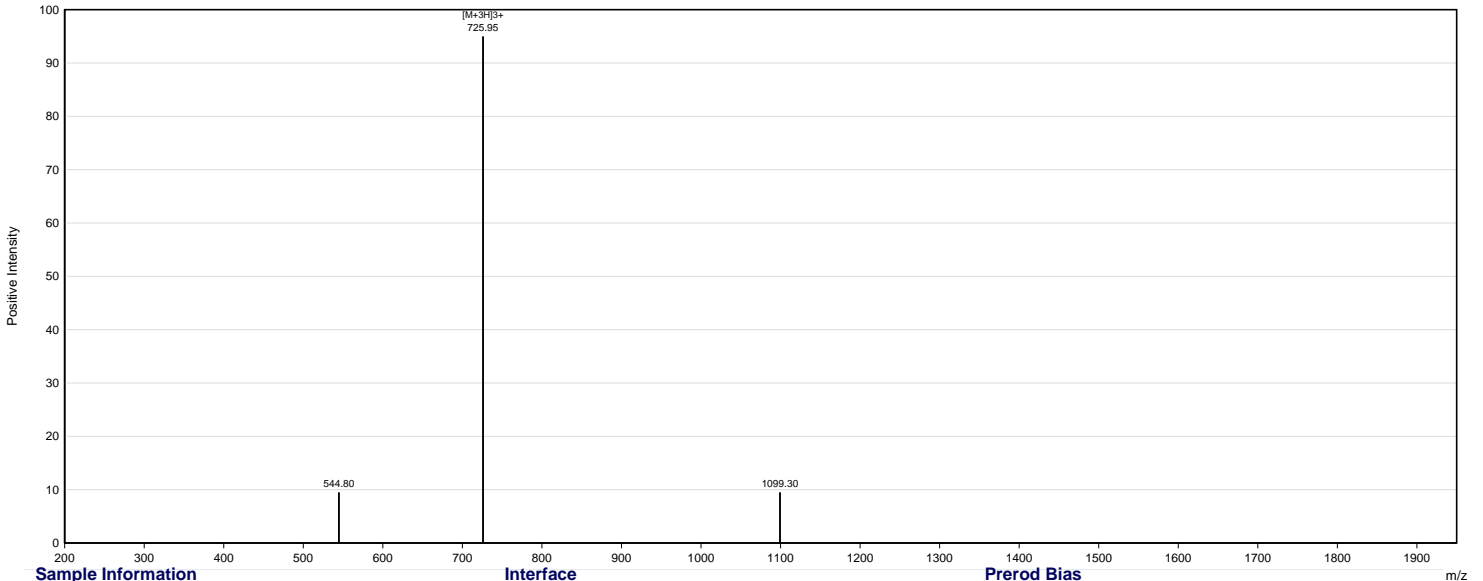


## Integration Results

No.	Ret. Time	Area	Height	Relative Area %	Amount
1	9.918	0.0742	0.553	0.016	n.a.
2	10.397	0.0147	0.104	0.003	n.a.
3	11.188	0.0239	0.149	0.005	n.a.
4	12.238	0.0274	0.224	0.006	n.a.
5	12.526	0.0725	0.405	0.016	n.a.
6	13.150	0.2176	1.372	0.048	n.a.
7	13.883	0.3181	2.389	0.069	n.a.
8	14.705	0.4133	2.119	0.090	n.a.
9	15.124	455.1020	1587.023	99.380	n.a.
10	15.938	0.1334	0.670	0.029	n.a.
11	16.454	1.0815	4.628	0.236	n.a.
12	16.773	0.0293	0.282	0.006	n.a.
13	17.284	0.0274	0.112	0.006	n.a.
14	17.803	0.1217	0.684	0.027	n.a.
15	19.399	0.2442	1.113	0.053	n.a.
16	20.526	0.0391	0.167	0.009	n.a.
<b>Total</b>				<b>100.000</b>	<b>n.a.</b>

**Conclusion: Main peak at RT 15.124 min, purity 99.38% by area**

## MS Spectrum



### Sample Information

Dissolution method :3%HAC+25%ACN+72%H2O  
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%H2O/70%MeOH

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**Lot No.** VI2120251117-10

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**Theoretical** 2174.63

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**Observed** 2174.85

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