

# Certificate of Analysis

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## Sample Identification

**Sample Name** MOTS-C 10 mg  
**Batch Number** 2026239  
**Date Published** 2026-05-28 13:52

## Results for LYO-0174

Peptides	Result	Unit	Uncertainty	Acceptable Range
MOTS-C Assay Peptide Screening 0.1% TFA	10.39	mg	[± 0.05]	
MOTS-C Purity Peptide Screening 0.1% TFA	99.2	%	[± 0.5]	
MOTS-C Identification by Spectrum (FTIR) Peptide Screening 0.1% TFA	997		[± 5]	
MOTS-C Identification by RT Peptide Screening 0.1% TFA	0.989		[± 0.005]	

	<b>Method Specification</b>	
<b>Determination of identity, content and purity of MOTS-C</b>		
<i>Document number</i> MOT_03_2026	<i>Superseded document</i> -	<i>Number of pages</i> 3

## 1. Content Assesment

### 1.1. Instrumentation

Module	Name	Serial Number
System Controller	Shimadzu CBM-20A	L20235355693
Degassing Unit	Shimadzu DGU-14A	NA
Pump A	Shimadzu LC-20AD	L20104350216
Pump B	Shimadzu LC-20AD	L20104451348
Autosampler	Shimadzu SIL-10ADvp	C21054109114
Colum Thermostat	Shimadzu CTO-10ACvp	C21033770144
Detector	Shimadzu SPD-10ADvp	C20994233588

### 1.2. Chromatographic conditions

Chromatographic conditions	
Eluent A	0.1% TFA in Water (HPLC, Gradient Grade)
Eluent B	0.1% TFA in Acetonitrile (HPLC, Gradient Grade)
Flow rate	0.4 mL/min
Program	Gradient elution
Injection volume	0.5 µL
Colum Temperature	60°C
Column	Phenomenex Biozen Peptide Polar C18, 150x2.1mm 3µm
Detection wavelength	280nm

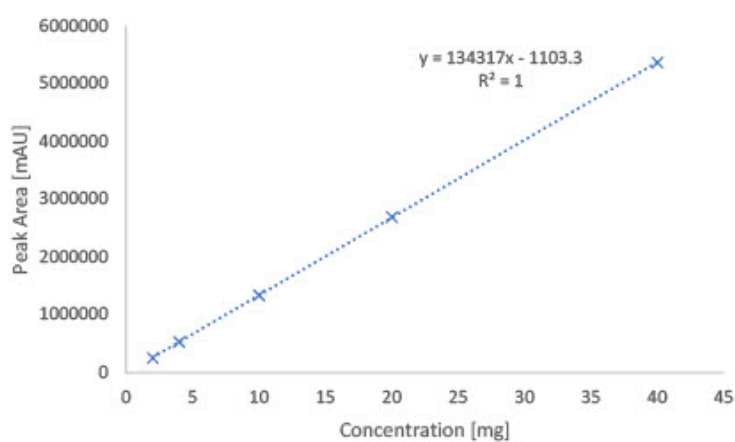
Gradient Program		
Time [min]	A [%]	B [%]
1	95	5
20.50	5	95
21.00	5	95
21.05	95	5
26	end	

### 1.3. Sample preparation

Whole amount of container was dissolved in 2mL of water (HPLC, Gradient Grade). Aliquote part of 1 mL was dispensed into HPLC vial for analysis.

### 1.4. Calibration curve

Calibration curve detail	
Quantitative method	External Standard
Calibration Type	Linear
Number of calibration points	5
Force through Zero	Disabled
Weighting Method	None



## 2. Purity assessment

### 2.1 Instrumentation

Module	Name	Serial Number
System Controller	Shimadzu CBM-20A	L20235355693
Degassing Unit	Shimadzu DGU-14A	NA
Pump A	Shimadzu LC-20AD	L20104350216
Pump B	Shimadzu LC-20AD	L20104451348
Autosampler	Shimadzu SIL-10ADvp	C21054109114
Colum Thermostat	Shimadzu CTO-10ACvp	C21033770144
Detector	Shimadzu SPD-10ADvp	C20994233588

### 2.2 Chromatographic conditions

Chromatographic conditions	
Eluent A	0.1% TFA in Water (HPLC, Gradient Grade)
Eluent B	0.1% TFA in Acetonitrile (HPLC, Gradient Grade)
Flow rate	0.4 mL/min
Program	Gradient elution
Injection volume	0.5 µL
Colum Temperature	60°C
Column	Phenomenex Biozen Peptide Polar C18, 150x2.1mm 3µm
Detection wavelength	214nm

Gradient Program		
Time [min]	A [%]	B [%]
1	95	5
20.50	5	95
21.00	5	95
21.05	95	5
26	end	

### 1.5. Sample preparation

Whole amount of container was dissolved in 2mL of water (HPLC, Gradient Grade). Aliquote part of 1 mL was dispensed into HPLC vial for analysis.

### 1.6. Purity assesment

Purity of compound assesed by area normalization method, comparing area of each peak to sum of area of all peaks detected at wavelenght of 214 nm.

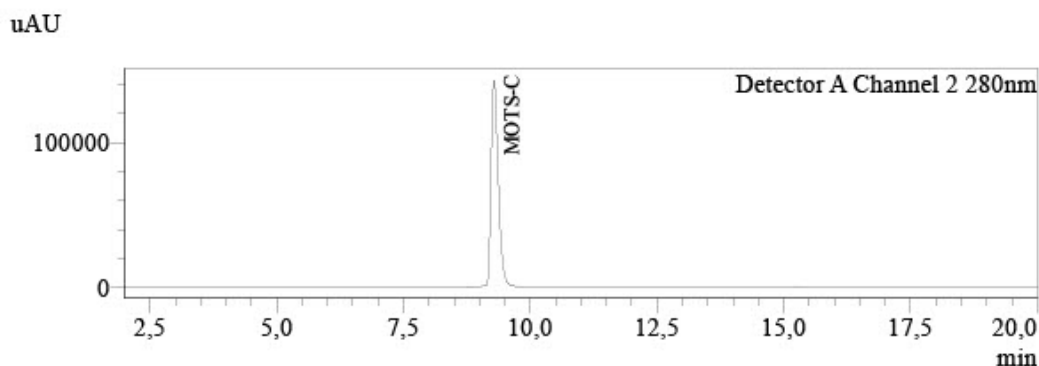
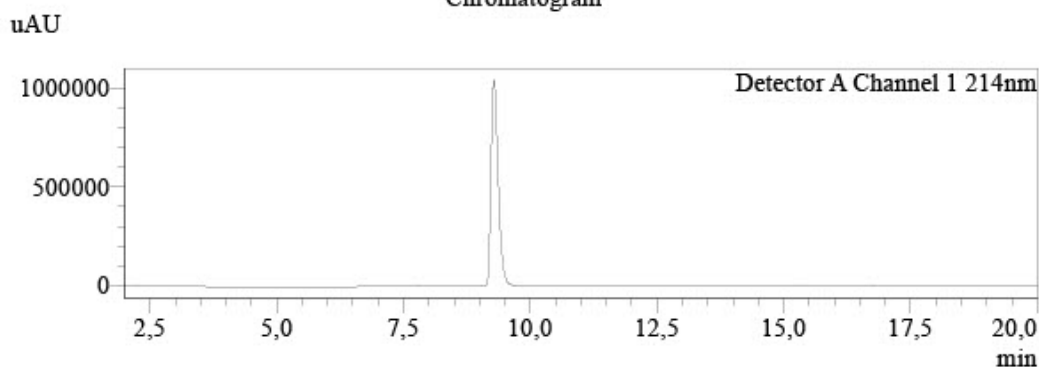
# Analysis Report



## Sample Information

Injection Volume : 0,5  
Data File : LYO-0174\_010.lcd  
Method File : Peptide screening\_202602\_Goup B.lcm  
Date Acquired : 27.05.2026 20:57:23

## Chromatogram



## Peak Table

Detector A Channel 1 214nm					
Peak#	Name	Ret. Time	Conc.	Unit	Area%
1		6.745	0.000		0.120
2		7.058	0.000		0.131
3		7.801	0.000		0.160
4		8.640	0.000		0.062
5		9.284	0.000		99.288
6		10.003	0.000		0.078
7		11.187	0.000		0.161
Total					100.000

## Peak Table

Detector A Channel 2 280nm				
Peak#	Name	Ret. Time	Conc.	Unit
1	MOTS-C	9.285	10.386	mg

## Responsibles



**Mr. Ján Galbavý**  
*CEO*

Analysis results relate only to the samples tested.

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