

Certificate of Analysis

Purexa
Purexa Peptide
Germany
Purexa-Peptide.de

Liquilabs s.r.o.
Inovační 122
252 41 Zlatníky-Hodkovice
Czechia
www.liquilabs.cz



[Verify Results Online](#)

Sample Identification

Sample Name MOTS-C 10 mg
Batch Number 708101
Date Published 2026-07-16 10:12

Results for LYO-0301

Peptides	Result	Unit	Uncertainty	Acceptable Range
MOTS-C Assay Peptide Screening 0.1% TFA	9.51	mg	[± 0.05]	
MOTS-C Purity Peptide Screening 0.1% TFA	99.8	%	[± 0.5]	
MOTS-C Identification by Spectrum (FTIR) Peptide Screening 0.1% TFA	992		[± 5]	
MOTS-C Identification by RT Peptide Screening 0.1% TFA	0.998		[± 0.005]	
Microbiology	Result	Unit	Uncertainty	Acceptable Range
Bacterial Endotoxin Chromgenic USP<85>/ Eur. Ph. 2.6.14. Bacterial Endotoxin Chromgenic Test	0.084	EU/mg	[± 0.002]	0 - 0.5
Elemental Impurities	Result	Unit	Uncertainty	Acceptable Range
Arsenic Elemental Impurities screening USP (232) / Ph. Eur. 5.20 / 2.4.20	< 0.001	ppm		0 - 1.5
Cadmium Elemental Impurities screening USP (232) / Ph. Eur. 5.20 / 2.4.20	< 0.001	ppm		0 - 0.5
Quicksilver Elemental Impurities screening USP (232) / Ph. Eur. 5.20 / 2.4.20	< 0.001	ppm		0 - 1.5
Lead Elemental Impurities screening USP (232) / Ph. Eur. 5.20 / 2.4.20	< 0.001	ppm		0 - 1.5
Nickel Elemental Impurities screening USP (232) / Ph. Eur. 5.20 / 2.4.20	< 0.001	ppm		0 - 25
Vanadium Elemental Impurities screening USP (232) / Ph. Eur. 5.20 / 2.4.20	< 0.001	ppm		0 - 25
Cobalt Elemental Impurities screening USP (232) / Ph. Eur. 5.20 / 2.4.20	< 0.001	ppm		0 - 25

	Method Specification		
Determination of identity, content and purity of MOTS-C			
<i>Document number</i> MOTS_006_2026	<i>Superseded document</i> -	<i>Number of pages</i> 4	

1. Content Assessment

1.1. Instrumentation

Module	Name	Serial Number
System Controller	Shimadzu CBM-40 Lite	L221226351398
Degassing Unit	Shimadzu DGU-403	NA
Pump	Shimadzu LC-40B XR	L22146350580
Autosampler	Shimadzu SIL-40C XR	L22216351622
Colum Thermostat	Shimadzu CTO-40S	L22236351602
PDA Detector	Shimadzu SPD-M40	L22276352808
SQ MS Detector	Shimadzu LCMS-2050	O12476200760

1.2. Chromatographic conditions

Chromatographic conditions	
Eluent A	0.05% TFA in Water (HPLC, Gradient Grade)
Eluent B	0.0425% TFA in Acetonitrile (HPLC, Gradient Grade)
Flow rate	0.9 mL/min
Program	Gradient elution
Injection volume	2 µL
Colum Temperature	55°C
Column	Waters XSelect CSH C18, 100x2.1mm 2.5µm
Detection wavelength	280nm

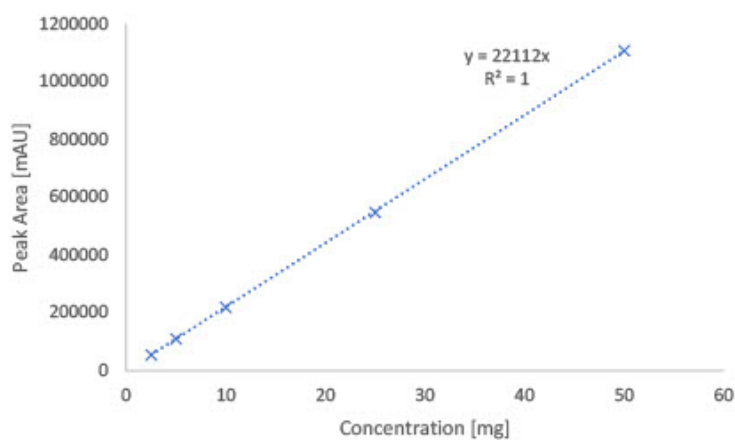
Gradient Program		
Time [min]	A [%]	B [%]
1.5	95	5
13	45	55
13.5	1	99
14.5	1	99
14.51	95	5
16	end	

1.3. Sample preparation

Whole amount of container was dissolved in 2mL of water (LCMS Grade). 100 µL of sample was transferred to HPLC vial and diluted by 900 µL water (LCMS Grade) and submitted for analysis.

1.4. Calibration curve

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



2. Purity assessment

2.1 Instrumentation

Module	Name	Serial Number
System Controller	Shimadzu CBM-40 Lite	L221226351398
Degassing Unit	Shimadzu DGU-403	NA
Pump	Shimadzu LC-40B XR	L22146350580
Autosampler	Shimadzu SIL-40C XR	L22216351622
Colum Thermostat	Shimadzu CTO-40S	L22236351602
PDA Detector	Shimadzu SPD-M40	L22276352808
SQ MS Detector	Shimadzu LCMS-2050	O12476200760

2.2 Chromatographic conditions

Chromatographic conditions	
Eluent A	0.05% TFA in Water (HPLC, Gradient Grade)
Eluent B	0.0425% TFA in Acetonitrile (HPLC, Gradient Grade)
Flow rate	0.9 mL/min
Program	Gradient elution
Injection volume	2 µL
Colum Temperature	55°C
Column	Waters XSelect CSH C18, 100x2.1mm 2.5µm
Detection wavelength	225nm

Gradient Program		
Time [min]	A [%]	B [%]
1.5	95	5
13	45	55
13.5	1	99
14.5	1	99
14.51	95	5
16	end	

2.3 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

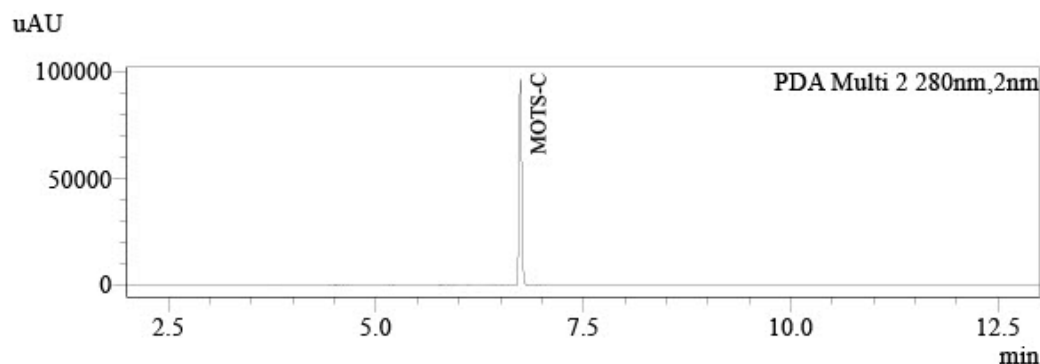
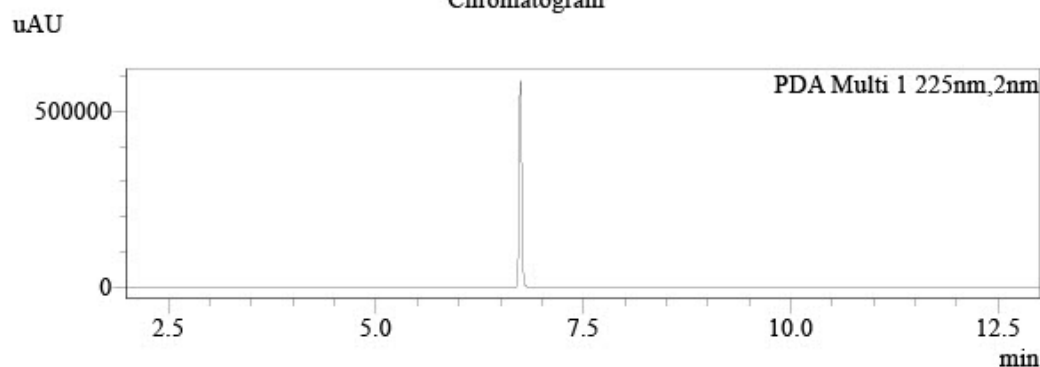


Analysis of quantity and purity of active ingredient by UHPLC with UV detection

Sample Information

Injection Volume : 2
Data File : LYO-0301_012.lcd
Method File : Peptide screening_V7_Group C.lcm
Date Acquired : 6/30/2026 3:41:30 PM

Chromatogram



Peak Table

PDA Ch1 225nm

Name	Ret. Time	Area	Conc.	Unit	Area%
	6.118	473	0.000		0.037
	6.409	688	0.000		0.054
	6.526	308	0.000		0.024
	6.606	970	0.000		0.075
	6.741	1282571	0.000		99.767
	6.917	171	0.000		0.013
	6.984	104	0.000		0.008
	7.033	35	0.000		0.003
	7.191	38	0.000		0.003
	7.250	43	0.000		0.003
	7.359	160	0.000		0.012
		1283560			100.000

Peak Table

PDA Ch2 280nm

Name	Ret. Time	Area	Conc.	Unit
MOTS-C	6.741	209554	9.505	mg
		209554		

Endotoxin Determination Report

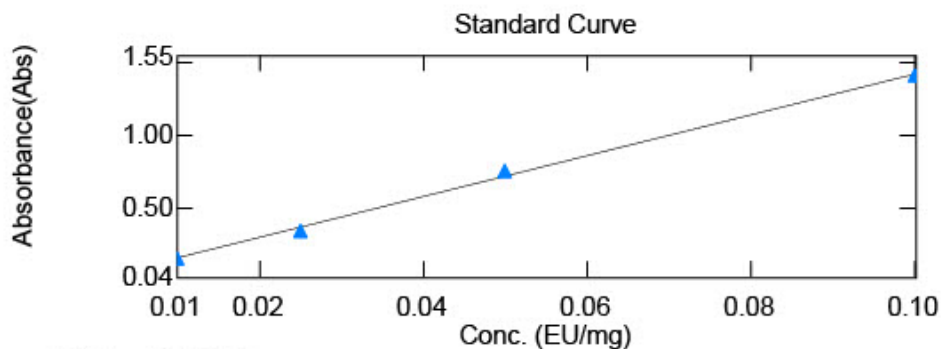


File Information

Filename: C:\UVVis-Data\Data\File_260713_144946.vqud
Date/Time: 07/13/2026 03:28:57 PM

Instrument Information

Instrument Type: UV-1900 Series
Model (S/N): UV-1900i (A12536253123)



$$y = 13.9884x + 0.0252453$$
$$r^2 = 0.99817$$

	Sample Name	Type	Conc	Result	Dilution Rate
1	LYO-0299	UNK	0.100	0.095	20.00
2	LYO-0300	UNK	0.233	0.189	20.00
3	LYO-0301	UNK	0.798	0.583	20.00
4	LYO-0302	UNK	0.642	0.474	20.00
5	LYO-0303	UNK	3.516	0.517	100.00
6	LYO-0321	UNK	0.116	0.107	20.00
7	LYO-0326	UNK	3.147	2.227	20.00
8	LYO-0327	UNK	0.022	0.041	20.00
9	LYO-0332	UNK	0.043	0.055	20.00
10	LYO-0333	UNK	0.041	0.054	20.00
11	LYO-0334	UNK	0.122	0.111	20.00
12	LYO-0335	UNK	0.264	0.210	20.00
13	LYO-0336	UNK	-0.011	0.017	20.00

Responsibles



Mr. Ján Galbavý
CEO

Analysis results relate only to the samples tested.

This document shall not be reproduced except in full, without the written approval of Liquilabs s.r.o.