Synaptica Analytics

Independent Laboratory Analysis Report

OFFICIAL ANALYTICAL DOCUMENT

REPORT ID
SYN-2026-005061

Analysis Report

Official laboratory analysis summary for the submitted sample and associated quality-control review.

SAMPLE	RECEIVED DATE	ANALYSIS DATE	REPORT GENERATED
MOTS-c	Aug 03, 2026	Aug 11, 2026	Aug 12, 2026

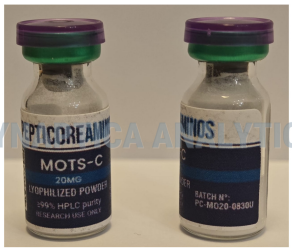
STRENGTH	20mg	MANUFACTURER	PepticoreAminos
BATCH NUMBER	PC-MO20-0830U	LAB CODE	982-3
CLIENT	www.pepticoreaminos.net		

SAMPLE INFORMATION

MOTS-c

20MG

FORM	White lyophilized powder in a glass vial
SAMPLE SUBMISSION	Sample provided by customer
BATCH	PC-MO20-0830U
CAP / CRIMP COLOR	Transparent violet / green
RECEIVED DATE	Aug 03, 2026



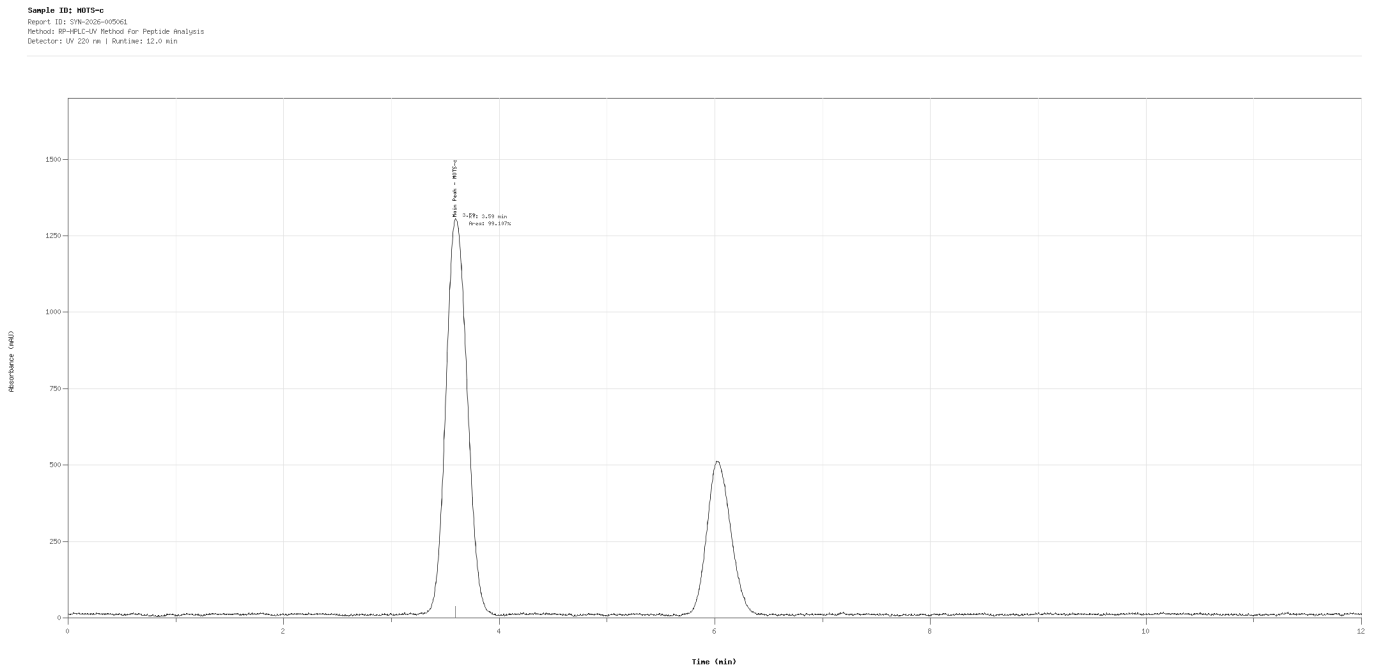
SAMPLE IMAGE

ANALYTICAL SUMMARY

IDENTITY	MOTS-c
PURITY	99.107%
QUANTITY	22.82mg
BATCH	PC-MO20-0830U
MANUFACTURER	PepticoreAminos

RP-HPLC-UV CHROMATOGRAM (220 NM)

Detection: UV 220 nm | Runtime: 12.0 min



METHOD

TIME	H2O + 0.1% TFA	ACN + 0.1% TFA
0min	92%	8%
2min	92%	8%
10min	10%	90%
12min	10%	90%

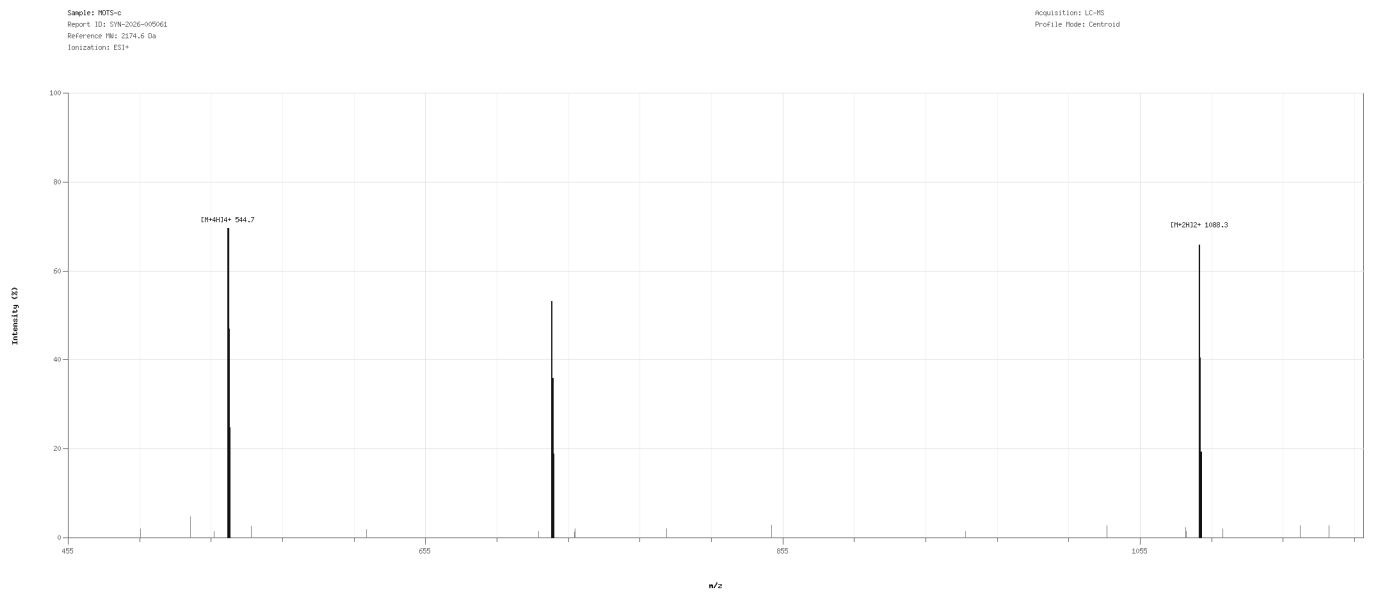
TECHNICAL NOTE

Results reported herein apply exclusively to the sample received and analyzed by the laboratory. Total runtime: 12.0 minutes.

COMMENTS

The sample meets the defined analytical specifications for identity, purity and related impurity profile under the applied RP-HPLC-UV method.

LC-MS MASS SPECTRUM



The recorded mass spectrum shows signals compatible with the expected molecular profile of the sample.

ANALYSIS & METHODOLOGY

STANDARD PEPTIDE PURITY, MASS & ADDITIONAL TESTING

RP-HPLC-UV analysis was conducted under standardized conditions. Retention time, peak symmetry and analytical response were reviewed against established internal benchmarks.

BIOBURDEN

TEST	RESULT	UNIT	REPORTING LIMIT
Total Aerobic Microbial Count USP <61>/Eur. Ph. 2.6.12. Plate Count Method	**Not detected**	**CFU/g**	**>= 1000**
Total Yeast and Mold Count USP <61>/Eur. Ph. 2.6.12. Plate Count Method	**Not detected**	**CFU/g**	**>= 100**

ENDOTOXIN ANALYSIS

TEST	RESULT	UNIT	REPORTING LIMIT
Bacterial Endotoxin USP<85>/ Eur. Ph. 2.6.14. Bacterial Endotoxin Chromogenic Test	**< 0.005**	**EU/mg**	**NMT 0.5**

HEAVY METALS

TEST	RESULT	UNIT	REPORTING LIMIT
Arsenic Elemental Impurities Screening	**Not detected**	**ppm**	**>= 1.5**
Cadmium Elemental Impurities Screening	**Not detected**	**ppm**	**>= 0.5**
Cobalt Elemental Impurities Screening	**Not detected**	**ppm**	**>= 25**
Lead Elemental Impurities Screening	**Not detected**	**ppm**	**>= 1.5**

TEST	RESULT	UNIT	REPORTING LIMIT
Nickel Elemental Impurities Screening	**Not detected**	**ppm**	**>= 25**
Quicksilver Elemental Impurities Screening	**Not detected**	**ppm**	**>= 1.5**
Vanadium Elemental Impurities Screening	**Not detected**	**ppm**	**>= 25**

TECHNICAL APPENDIX

This appendix documents the analytical methodology, instrumentation and acceptance criteria applied for the evaluation of the sample.

COMPOUND REFERENCE

PARAMETER	MOTS-C
PUBCHEM CID	146675088
CAS	1627580-64-6
MOLECULAR FORMULA	C101H152N28O22S2
MOLECULAR WEIGHT	2174.6 g/mol

METHOD SPECIFICATION

PARAMETER	RP-HPLC-UV METHOD FOR PEPTIDE ANALYSIS
ANALYTICAL MODE	Purity assessment of peptide sample by RP-HPLC-UV
COLUMN	C18 peptide column, 150 x 4.6 mm equivalent
MOBILE PHASE A	Water + 0.1% TFA
MOBILE PHASE B	Acetonitrile + 0.1% TFA
FLOW RATE	0.8 mL/min
DETECTION	UV 220 nm
INJECTION VOLUME	10 uL
RUNTIME	12.0 min
SAMPLE DILUENT	Aqueous organic diluent compatible with peptide analysis
SAMPLE PREPARATION	Diluted, mixed and clarified before injection

INSTRUMENT PLATFORM

PARAMETER	STANDARD HPLC-UV PLATFORM
SYSTEM TYPE	Analytical HPLC system
DETECTOR	UV/VIS detector
ACQUISITION	Chromatographic acquisition and integration software
REVIEW MODE	Retention-time, UV response and mass-spectrum review

PARAMETER	STANDARD HPLC-UV PLATFORM
WORKFLOW NOTE	Used for routine peptide purity and identity screening
MS DETECTOR	Mass spectrometer, ESI+ acquisition
MS ACQUISITION	LC-MS spectral acquisition and processing

ANALYTICAL CRITERIA

PARAMETER	ACCEPTANCE FRAMEWORK	BASIS
IDENTITY	Retention-time and profile agreement with reference expectations	Chromatographic identity review
PURITY	NLT 98.0% unless a stricter report-specific specification is declared	Integrated RP-HPLC-UV purity profile
QUANTITY	Measured content reviewed against the declared sample strength	Report-level analytical summary
BIOBURDEN	Not detected or within stated reporting limits	Microbial screening table
ENDOTOXIN	Below stated reporting limit / internal screening threshold	Endotoxin analysis table
HEAVY METALS	Below individual reporting limits where screened	Elemental impurities screening table

This appendix documents the analytical methodology, instrumentation and acceptance criteria applied for the evaluation of the sample.

VERIFICATION

Verify this report through the official Synaptica Analytics verification page using the details below.
Verification URL synaptica-labs.com/verify-report
Report ID SYN-2026-005061
Verification Key VK-LCKG-678A

SCAN TO VERIFY

DIGITAL SIGNATURE



DIGITALLY SIGNED BY:
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Date: 2026.08.12
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Director