

Analysis Report

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

SAMPLE MOTS-c	RECEIVED DATE Jul 20, 2026	ANALYSIS DATE Jul 24, 2026	REPORT GENERATED Jul 27, 2026
STRENGTH	40mg	MANUFACTURER	PeptiCoreAminos
BATCH NUMBER	PC-MS4-0826U	LAB CODE	982-3
CLIENT	www.peptiCoreAminos.net		

SAMPLE INFORMATION

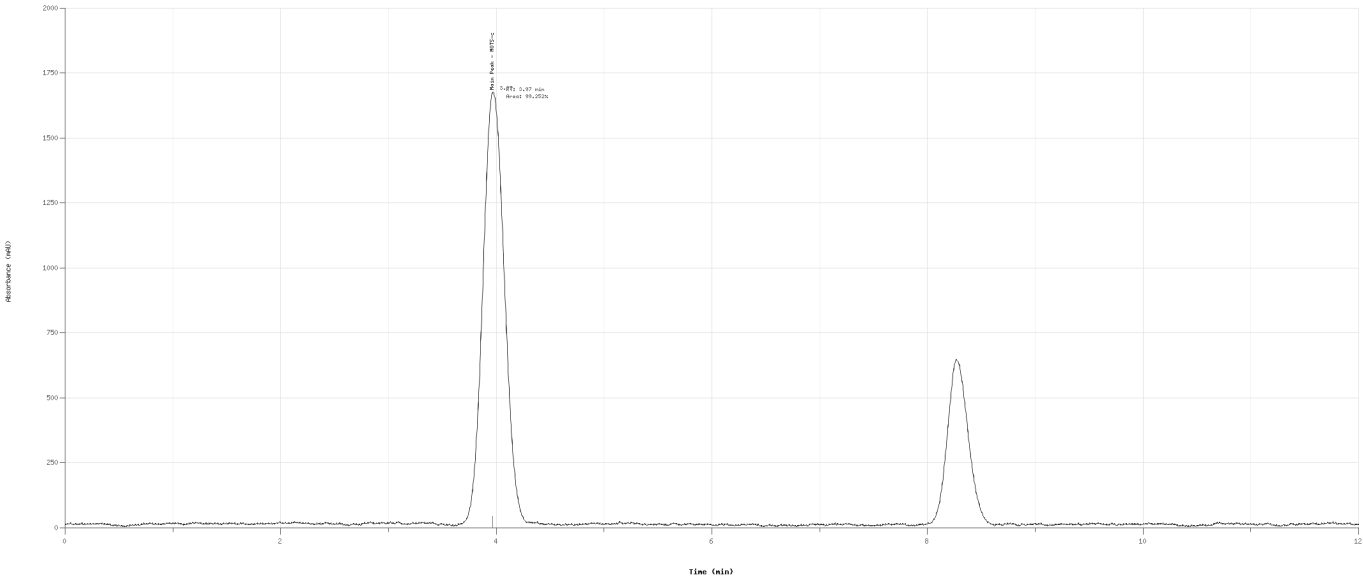
MOTS-c 40MG FORM White lyophilized powder in a glass vial SAMPLE SUBMISSION Sample provided by customer BATCH PC-MS4-0826U CAP / CRIMP COLOR Purple/blue RECEIVED DATE Jul 20, 2026	 SAMPLE IMAGE
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ANALYTICAL SUMMARY

IDENTITY	MOTS-c
PURITY	99.252%
QUANTITY	46.13mg
BATCH	PC-MS4-0826U
MANUFACTURER	PeptiCoreAminos

RP-HPLC-UV CHROMATOGRAM (220 NM)
Detection: UV 220 nm | Runtime: 12.0 min

Sample ID: M015-C
Report ID: 018-2020-00047
Method: RP-HPLC-UV Method for Peptide Analysis
Detector: 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%

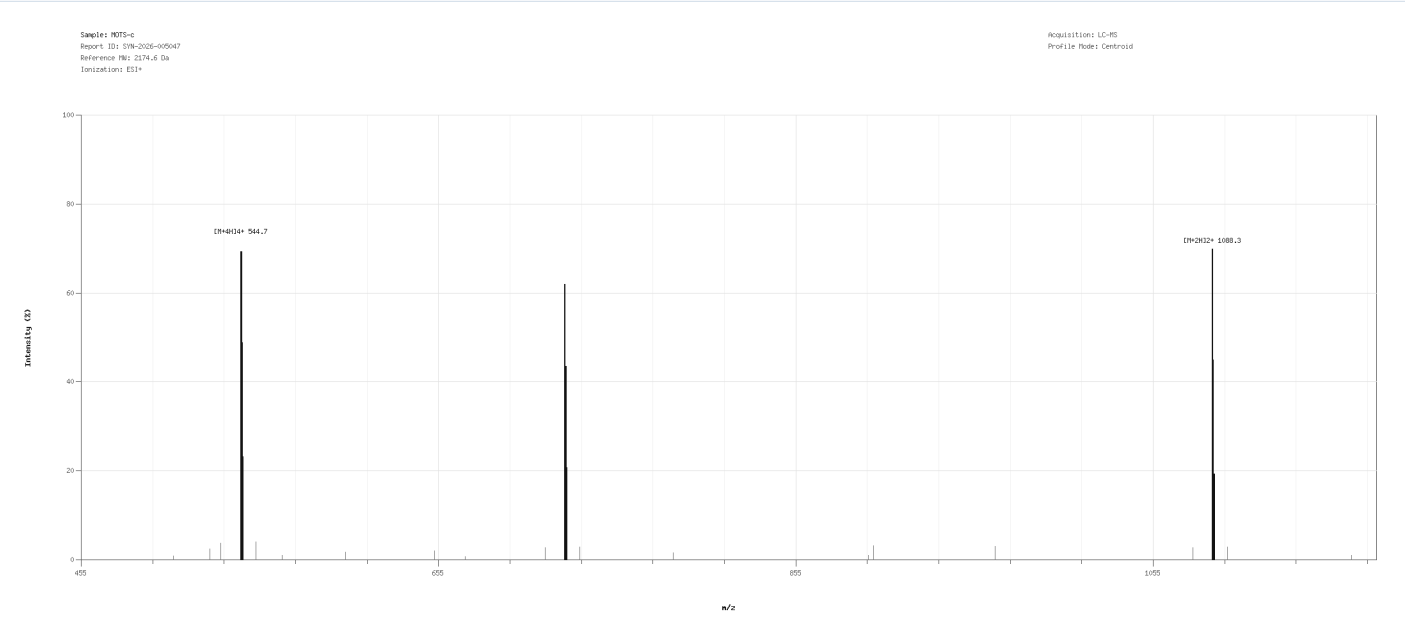
TECHNICAL NOTE

This report reflects the analytical findings obtained for the submitted sample under the stated test conditions. Total runtime: 12.0 minutes.

COMMENTS

The sample meets the defined analytical specifications for identity, purity and impurity profile according to the applied RP-HPLC-UV analytical review.

LC-MS MASS SPECTRUM



Observed ion distribution is consistent with the expected mass profile of the submitted analyte.

ANALYSIS & METHODOLOGY

STANDARD PEPTIDE PURITY, MASS & ADDITIONAL TESTING

Sample analyzed by reverse-phase HPLC with UV detection using controlled analytical parameters. Chromatographic behavior and purity response were assessed through internal laboratory criteria.

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	< 0.001	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

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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-2026-005047

Verification Key VK-8G2N-6EEF

SCAN TO VERIFY



DIGITAL SIGNATURE

DIGITALLY SIGNED BY:
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Date: 2026.07.27
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Director