Gold Standard Analytics

Gold Standard Analytics LLC, Houston, TX

CERTIFICATE OF ANALYSIS

Report GSA-COA-000141-14103-20261126 · issued Nov 26, 2026

Mark Miscione

PRODUCT	ORDER	SAMPLE
MOTS-c	GSA-2026-000141	141-03
LABEL	**LOT**	**ISSUED**
Skynet Peptides, MOTS-c 40 mg	04SP42001	Nov 26, 2026



THE SAMPLE AS RECEIVED

IDENTITY

MOTS-c

confirmed by mass

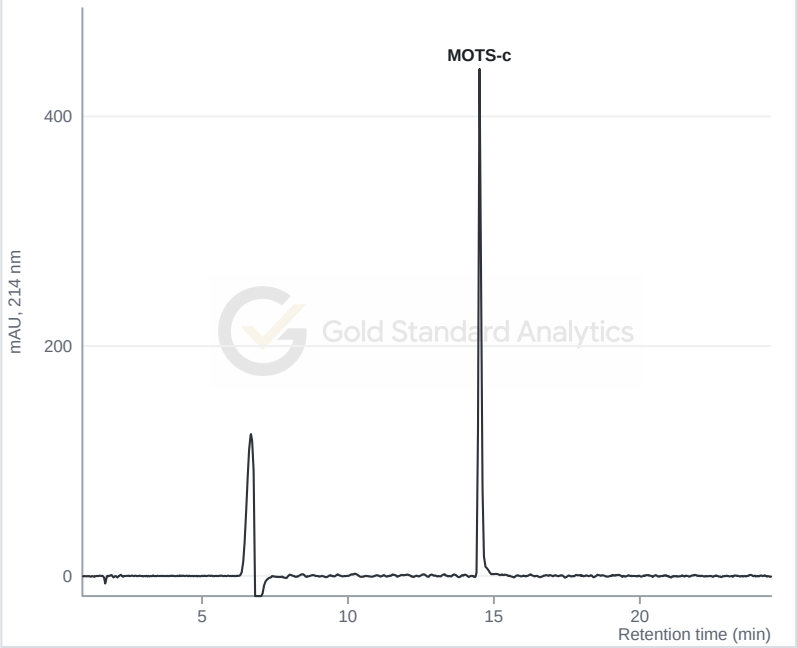
PURITY

99.24 %

HPLC-UV, 214 nm

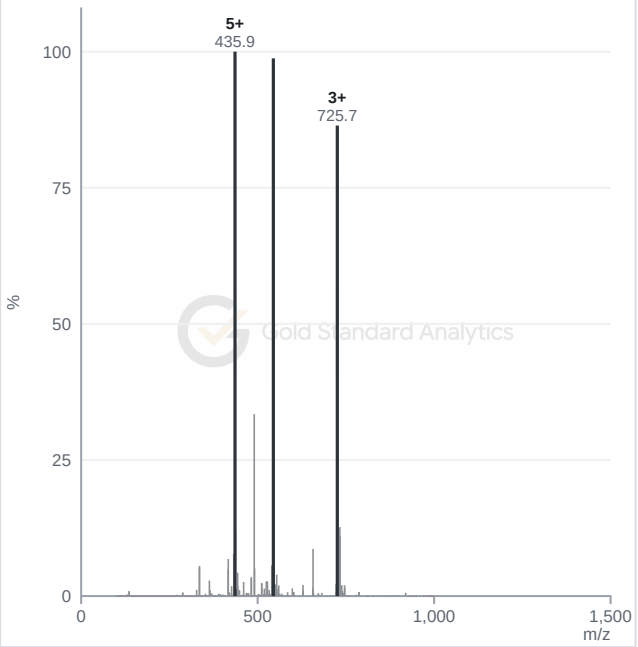
HPLC CHROMATOGRAM

UV, 214 nm



MASS SPECTRUM

main peak (14.51 min)



RELEASED BY

Ian Ebert

Chemist & Lab Lead · Nov 27, 2026

Scan to verify

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Results are not covered by ISO/IEC 17025 accreditation. Results relate only to the sample as received and tested.

The sample

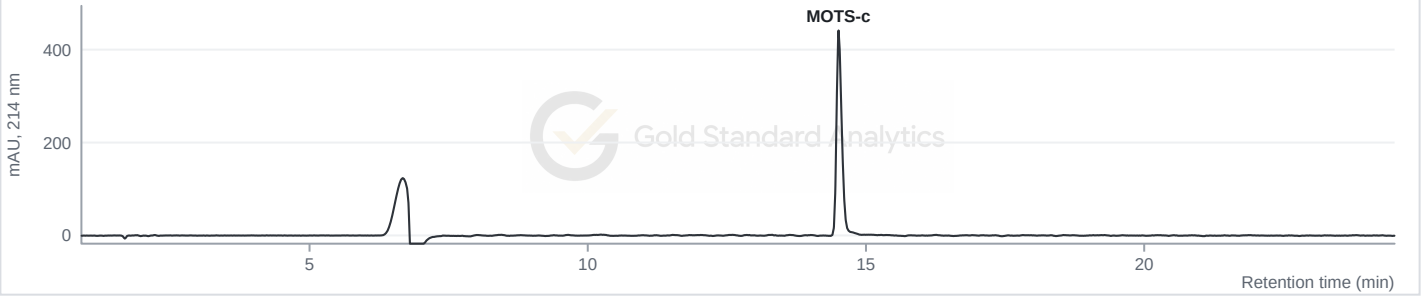
Order GSA-2026-000141 · Sample 141-03 · Mark Miscione

Customer	**Mark Miscione**	Lot	**04SP42001**
Order	**GSA-2026-000141**	Prepared	**25 Nov 2026**
Sample	**141-03**	Tested	**26 Nov 2026**
Label	**Skynet Peptides, MOTS-c 40 mg**	Tests	**Identity, Purity**

Graphs

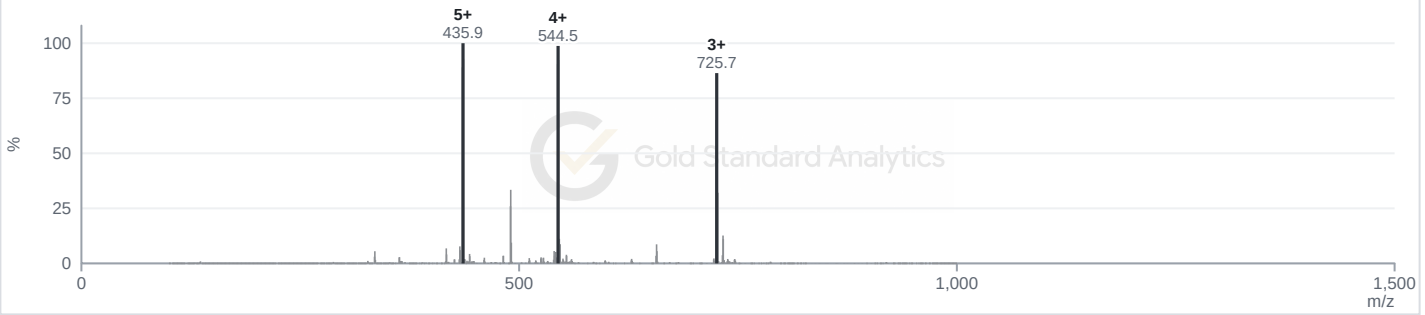
HPLC CHROMATOGRAM

HPLC chromatogram (UV, 214 nm) · mAU, 214 nm against Retention time (min)



MASS SPECTRUM

Mass spectrum of the main peak (14.51 min) · Counts against m/z



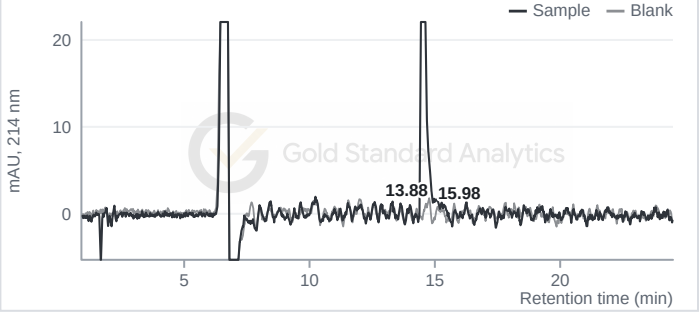
Results

Identity	**Consistent with MOTS-c.** The main peak is MOTS-c at 14.51 min (m/z 725.7 and m/z 544.5; measured mass 2,174.2, expected 2,174.6).
Purity	**99.24 %** by HPLC with UV detection at 214 nm (share of the total peak area). 4 impurities were found and are listed below: forms of the peptide identified by mass, which are counted at any size. Other peaks count above about 0.64 % of the MOTS-c peak height. The peptide peak was too strong to measure in a 1.5 µL injection, so its area is taken from a 0.5 µL injection of the same solution, scaled by the injection volumes, and the impurities are counted in the 1.5 µL injection; peaks within 0.3 min of the peptide peak could not be judged there. The vial also contains a sugar alcohol such as mannitol (a common vial filler), seen by mass at the start of the run; it is not a peptide and is not counted in purity.

Zoomed views

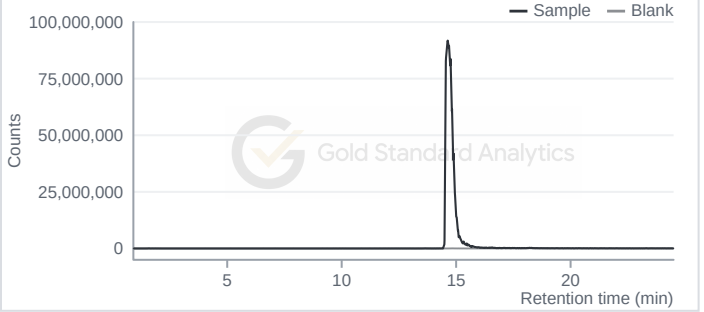
HPLC, SMALL PEAKS

Zoomed in on the small peaks (5 % of the main peak) · mAU, 214 nm against Retention time (min)



ION TRACE

Ion trace, m/z 725.9 (MOTS-c [M+3H]3+): sample vs blank · Counts against Retention time (min)



Impurities

Every peak other than the declared peptide that was counted:

PEAK (MIN)	AMOUNT	WHAT IT IS
12.80	0.13 %	MOTS-c with two extra oxygen atoms (mass about 2,207 instead of 2,175). This fits oxidation, a common change during storage.
13.29	0.17 %	MOTS-c with one extra oxygen atom (mass about 2,191 instead of 2,175). This fits oxidation, a common change during storage.
13.88	0.39 %	MOTS-c with one extra oxygen atom (mass about 2,191 instead of 2,175). This fits oxidation, a common change during storage.
15.98	0.06 %	MOTS-c with an added group of mass 42 (mass about 2,217 instead of 2,175); this fits an extra acetyl group, a known by-product of peptide synthesis.

> Amounts are each peak's share of the total UV peak area at 214 nm.

How it was tested

Liquid chromatography with UV and mass-spectrometry detection: Agilent 1290 Infinity II LC with a 6490 triple-quadrupole mass spectrometer. Column Polaris C18-A, 2.0 x 150 mm, 45 °C; water and acetonitrile, each with 0.1 % formic acid. Purity: UV peak area at 214 nm, after subtracting a blank run in the same sequence. Identity: molecular mass from the mass spectrum. 0.5 µL and 1.5 µL injected; autosampler at 12 °C.

Notes

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Release

This report is signed electronically at release. The signature is printed on page 1, and the release record, added as the last page, gives the date and the verification code.

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Release record

Report GSA-COA-000141-14103-20261126 · Certificate GSA-2026-796435

Customer and order	Mark Miscione · GSA-2026-000141
Sample and report	141-03 · MOTS-c Certificate of Analysis
Report reference	GSA-COA-000141-14103-20261126
Certificate accession	GSA-2026-796435
Released and signed by	Ian Ebert, Chemist & Lab Lead
Date and time (UTC)	2026-11-27 06:59:12Z
Signature meaning	Approved for release. The signer reviewed this report and approved its release to its customer.
Approval reference	374a9061-5d25-4cb1-b0fd-320f1e4907b7
Electronic signature	Signed electronically in a signed-in GSA staff account.
Original report SHA-256	987d3a2f8ef74c513978795770634e3a590088e10fb6330e72a9da1d50b12457
Verify this certificate	https://goldstandardanalytics.com/coa/GSA-2026-796435

Scan to view this certificate online

Signature

Ian Ebert, Chemist & Lab Lead

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