Axiom ANALYTICS

CERTIFICATE OF ANALYSIS · 4X ESSENTIAL PANEL + 1 ADD-ON LAYER (L8)

Axiom Analytics Laboratories
2108 N St Ste N, Sacramento, CA 95816 US

SCAN TO VERIFY

AX-2026-3761-P5S2

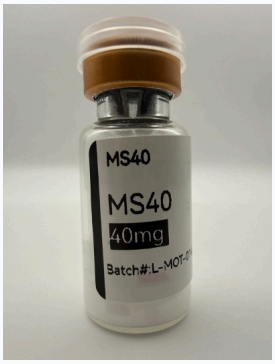
MOTS-C 40 mg · Lot L-MOT-014
Issued Oct 17, 2026 PT · v1
Verify: 0DF7-6B91-8153

PASS — ALL SPECIFICATIONS MET

5 of 5 layers complete

L1	L2	L3	L4	L8
Identity	Purity	Net Peptide Content	Sterility	Fentanyl Screen

Sample & Vial Validation



Vial A: as received & analyzed

MORE VIEWS OF VIAL A



Vial A · right

Brand	**Research Vault Group**	Product	**MOTS-C 40 mg**
Lot / Batch	**L-MOT-014**	Label Claim	**40 mg**
Matrix	**Lyophilized powder**	Sample Count	**1**
Vial Size	**10mL**	Cap Color	**Clear**
Crimp Color	**Bronze**	Contents Color	**White**
Seal Intact	**Yes**	Condition	**sealed, intact**
Received	**Oct 9, 2026 PT**	Sampling	**client submitted**

Test Results

Test	Specification	Result	
Identity research screen	every vial within ±1 Da of 2174.621 Da	2174.501 Da	PASS
Purity research screen	≥ 99.25 area %	99.97%	PASS
Net Peptide Content research screen	every vial within ±10% of 40 mg	Vial A: 41.57 mg	PASS
Sterility · Rapid PCR research screen	Rapid PCR screen	Target DNA not detected	PASS
Fentanyl Screen research screen	no fentanyl or analog at or above 1 ng/mg	none detected	PASS

Results relate only to the item or portion tested. Unless sampling was performed or witnessed by Axiom Analytics, the laboratory does not attest that the submitted sample represents the wider lot or batch. A PASS designation means only that the reported result met the specification shown. It does not establish safety, efficacy, regulatory approval, legality, or suitability for human or animal use.

Axiom
ANALYTICS

CERTIFICATE OF ANALYSIS · 4X ESSENTIAL PANEL + 1 ADD-ON LAYER (L8)

Axiom Analytics Laboratories
2108 N St Ste N, Sacramento, CA 95816 US

SCAN TO VERIFY

AX-2026-3761-P5S2

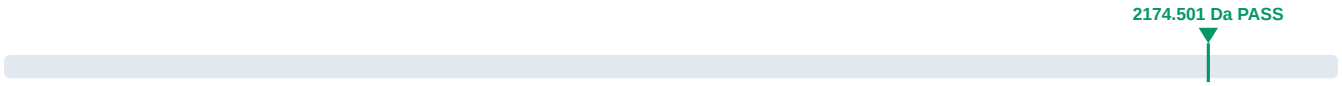
MOTS-C 40 mg · Lot L-MOT-014
Issued Oct 17, 2026 PT · v1
Verify: 0DF7-6B91-8153

Layer Results

1 Identity
LC-MS (ESI+)

2174.501 Da — every vial within ±1 Da of 2174.621 Da — **PASS**

Theoretical mass	**2174.621 Da**	Acceptance	**within ±1 Da**
Vial A	**2174.501 Da · PASS**		



2 Purity
RP-HPLC 214nm (USP <621>)

99.97% — ≥ 99.25 area % — **PASS**

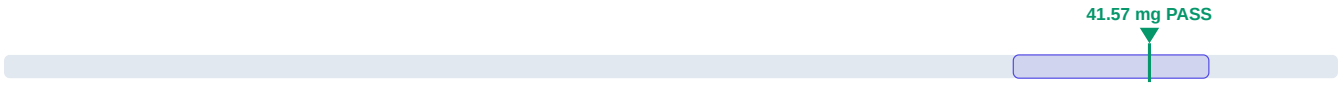
Acceptance	**≥ 99.25%**	Vial A	**99.97% · PASS**
Criterion source	**Axiom Analytics SPEC-PURITY-001, Revision 1, effective 2026-08-31**		



3 Net Peptide Content
Quantitative HPLC vs reference std

Vial A: 41.57 mg — every vial within ±10% of 40 mg — **PASS**

Target	**40 mg (±10%)**	Vial A	**41.57 mg · PASS**
Confirmed container volume	**Unknown**	Content concentration	**Unknown**



4 Sterility · Rapid PCR
Rapid Microbial DNA Screen (qPCR target panel)

Target DNA not detected — Rapid PCR screen — **PASS**

Result	**Target DNA not detected**	Acceptance	**Rapid PCR screen**
Target panel	**Pan-bacterial 16S rRNA gene (VIC), Pan-fungal 18S rRNA gene (FAM)**		

Run controls valid.

Results relate only to the item or portion tested. Unless sampling was performed or witnessed by Axiom Analytics, the laboratory does not attest that the submitted sample represents the wider lot or batch. A PASS designation means only that the reported result met the specification shown. It does not establish safety, efficacy, regulatory approval, legality, or suitability for human or animal use.

Axiom Analytics Laboratories
2108 N St Ste N, Sacramento, CA 95816 US

AX-2026-3761-P5S2

MOTS-C 40 mg · Lot L-MOT-014
Issued Oct 17, 2026 PT · v1
Verify: 0DF7-6B91-8153

SCAN TO VERIFY

8 Fentanyl Screen

LC-MS/MS targeted adulterant screen

none detected
no fentanyl or analog at or above 1 ng/mg

PASS

Result	**Not detected**	Detection limit	**1 ng/mg**
Analytes screened	**Fentanyl, Acetylfentanyl, Acrylfentanyl, Butyrylfentanyl, Carfentanil, Cyclopropylfentanyl, Furanylfentanyl, Methoxyacetylfentanyl, ortho-Fluorofentanyl, Valerylfentanyl, 4-ANPP (despropionyl fentanyl)**	Source container	**A**

Reporting Scope & Limitations

`[Sterility · Rapid PCR]` DNA-target research screen only. It detects microbial DNA from viable and non-viable organisms alike, and is neither viable-CFU enumeration under USP <61> nor a batch sterility determination under USP <71>.

`[Fentanyl Screen]` Targeted LC-MS/MS adulterant screen, reported as detected or not detected against its stated detection limit. A harm-reduction research screen, not an exhaustive adulterant panel.

Digital Signatures

Analyst	**Alana Reeves**	Analyst Signature	**ed25519:6b6a0037cc71e506f6b032cc...**
Technical Reviewer	**Michael Niles**	Reviewer Signature	**ed25519:2cf465b528a2e351615ee561...**
Laboratory Director	**Daniel Brennan**	Director Signature	**ed25519:62b5cd716d85cd92de341b5f...**

Where physical instrument analysis is performed, it takes place within Axiom Analytics' laboratory network, allocated at Axiom's discretion based on method, capacity, and order volume. Axiom Analytics performs sample accession, chain of custody, analytical oversight, and data review, and issues and is responsible for this certificate. Where analysis is subcontracted, the method is performed within the partner laboratory's published ISO/IEC 17025 scope of accreditation for that method, not merely at a laboratory holding ISO/IEC 17025 accreditation. Axiom Analytics does not itself currently hold ISO/IEC 17025 accreditation. The method-validation status of each reported result is identified beside that result. Partner laboratory identities are not disclosed: where samples are analyzed under double-blind conditions, they are identified only by an internal lot ID.

Each signature is an ed25519 signature over the SHA-384 hash of this report. Scan the QR on the letterhead or verify independently at https://axiomanalyticslab.com/verify/AX-2026-3761-P5S2.

✓ **CRYPTOGRAPHICALLY SEALED (ed25519 + SHA-384)**

`SHA-384: f1e6f9381f948bcb9ffb2e382980f4b9f4d9be605336f92a369f175137c31379...`

`Seal: ed25519:6f889a735637545501fdca12734837178e496122...`

Results relate only to the item or portion tested. Unless sampling was performed or witnessed by Axiom Analytics, the laboratory does not attest that the submitted sample represents the wider lot or batch. A PASS designation means only that the reported result met the specification shown. It does not establish safety, efficacy, regulatory approval, legality, or suitability for human or animal use.

RESEARCH USE ONLY. All analytical testing, validation reports, and interactive Certificates of Analysis (COAs) provided by Axiom Analytics are intended strictly for Research Use Only (RUO) in in-vitro or laboratory animal model environments. Axiom Analytics does not analyze, validate, evaluate, or make any representations regarding the safety, efficacy, toxicity, or legality of any tested substance for human or animal consumption, veterinary use, clinical diagnostics, food additives, cosmetics, or household applications.

Results relate only to the item or portion tested. Unless sampling was performed or witnessed by Axiom Analytics, the laboratory does not attest that the submitted sample represents the wider lot or batch. A PASS designation means only that the reported result met the specification shown. It does not establish safety, efficacy, regulatory approval, legality, or suitability for human or animal use.