Axiom
ANALYTICS

CERTIFICATE OF ANALYSIS · 4X ESSENTIAL PANEL

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

AX-2026-3239-TGBT

MOTS-c · Lot CP01260808520L
Issued Oct 11, 2026 PT · v1
Verify: 40D5-F79C-9043

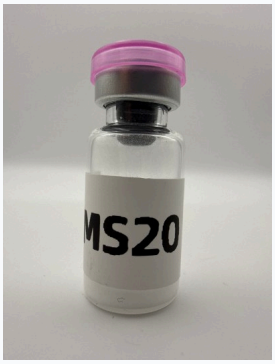
SCAN TO VERIFY

PASS — ALL SPECIFICATIONS MET

4 of 4 layers complete

L1	L2	L3	L4
Identity	Purity	Net Peptide Content	Sterility

Sample & Vial Validation



Vial A: as received & analyzed

Client	**Unidentified source**	Product	**MOTS-c**
Lot / Batch	**CP01260808520L**	Label Claim	**20 mg**
Matrix	**lyophilized powder**	Sample Count	**1**
Vial Size	**3mL**	Cap Color	**Translucent Pink**
Crimp Color	**Silver / Aluminum**	Contents Color	**White**
Seal Intact	**Yes**	Condition	**sealed, intact**
Received	**Oct 6, 2026 PT**	Sampling	**client submitted**

Test Results

Test	Specification	Result	
Identity research screen	every vial within ±1 Da of 2174.621 Da	`2174.576 Da`	PASS
Purity research screen	≥ 99.25 area %	`99.61%`	PASS
Net Peptide Content research screen	every vial within ±10% of 20 mg	`Vial A: 21.24 mg`	PASS
Sterility · Rapid PCR research screen	Rapid PCR screen	`Target DNA not detected`	PASS

Layer Results

1 Identity

LC-MS (ESI+)

1 physical-vial mass observation
each +/- 1 Da (theor. 2174.621)

PASS

Mass consistent with MOTS-c

Theoretical mass **2174.621 Da** Acceptance **+/- 1 Da**

Vial	Observed mass	Mass error	Status
Vial A	`2174.576 Da`	`-0.045 Da`	PASS

2174.576 Da PASS

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2 Purity

RP-HPLC 214nm (USP <621>)

1 physical-vial purity observation
≥ 99.25 area %

PASS

≥ 99.25 area %

Vial	Purity	Status
Vial A	99.61%	PASS

Criterion source — **Axiom Analytics SPEC-PURITY-001, Revision 1, effective 2026-08-31**

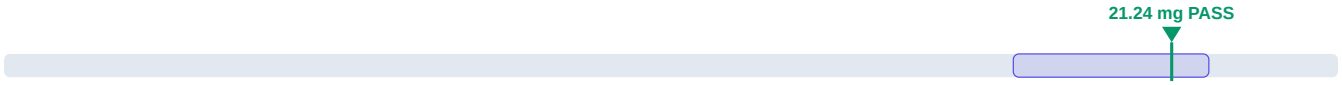


3 Net Peptide Content

Quantitative HPLC vs reference std

21.24 mg
each within +/- 10% of 20 mg

PASS



Vial	Measured	Status
Vial A	21.24 mg	PASS

4 Sterility

Rapid Microbial DNA Screen (qPCR target panel)

Sterility · Rapid PCR: Target DNA not detected
No microbial target DNA detected

PASS

Sterility · Rapid PCR — PASS

Result: **Target DNA not detected** | Specification: **Rapid PCR screen**

Run controls valid.

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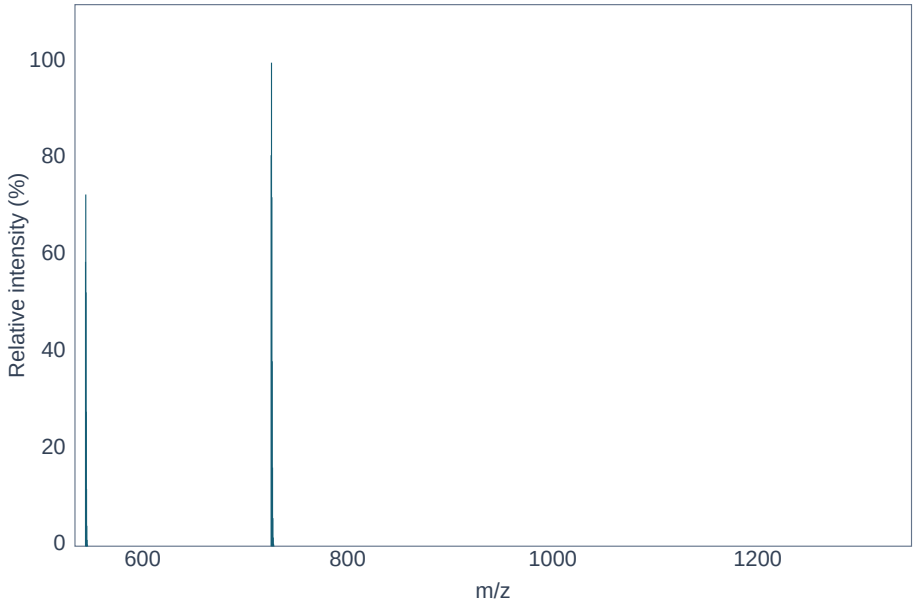
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LC-MS Mass Spectrum · Vial A · LC-MS (ESI+)



Recorded deconvoluted average mass: 2174.576 Da

Charge	Observed m/z	Deconvoluted mass (Da)	Relative intensity (%)
3+	725.865	2174.573	100.0
4+	544.652	2174.579	72.7

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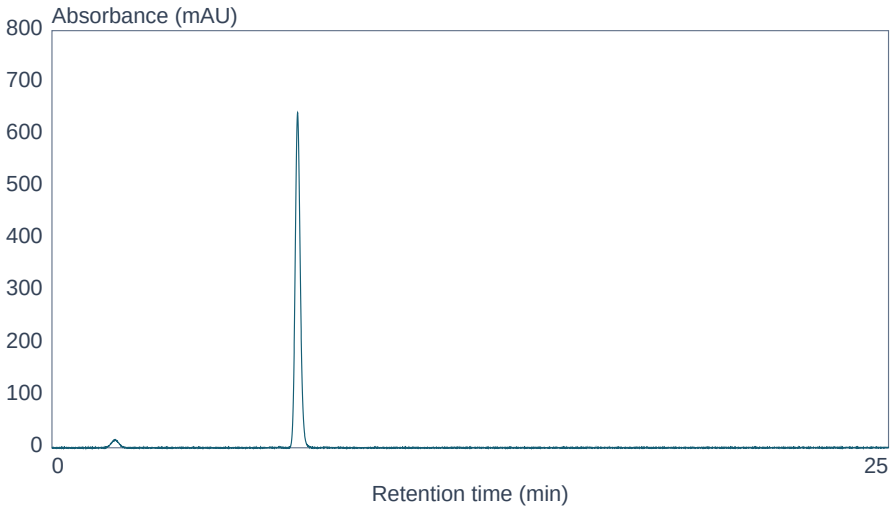
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HPLC Chromatogram · Vial A · RP-HPLC 214 nm



Peak	Retention time (min)	Area %
1	6.513	0.049
2	6.822	0.094
3	7.340	99.610
4	7.478	0.074
5	8.170	0.099
6	8.573	0.074

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>.

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Digital Signatures

Analyst	**Alana Reeves**	Analyst Signature	**ed25519:8daa5c7231624840311a6700...**
Technical Reviewer	**Michael Niles**	Reviewer Signature	**ed25519:da3428a4bf5f591396905796...**
Laboratory Director	**Daniel Brennan**	Director Signature	**ed25519:a602f8b11786a89ffe94044c...**

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-2026-3239-TGBT.

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SHA-384: b7e02ef0dc46bb397d301d4f52baa0244fa0be6dc27ab2a87e0f4d5ed4e354e7...

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