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

AX-2026-4349-8Q3B

NAD+/MOTS-c/5-Amino-1MQ · Lot T-NEX-0099
Issued Oct 2, 2026 · v1
Verify: E112-91D5-8359

SCAN TO VERIFY

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

Client	**Liberty Research Solutions**	Product	**NAD+/MOTS-c/5-Amino-1MQ**
Lot / Batch	**T-NEX-0099**	Label Claim	**NAD+ 100 mg + MOTS-C 10 mg + 5-Amino-1MQ 10 mg**
Matrix	**lyophilized powder**	Sample Count	**1**
Cap Color	**Black**	Crimp Color	**Silver / Aluminum**
Contents Color	**White**	Seal Intact	**Yes**
Condition	**sealed, intact**	Received	**Sep 24, 2026**
Sampling	**client submitted**		

Test Results

Test	Specification	Result	
Identity research screen	every declared component within ±1 Da of its own theoretical mass	`3 of 3 components confirmed`	PASS
Purity validated in house	each declared component at or above its own locked purity criterion	`3 of 3 components within criterion`	PASS
Net Peptide Content research screen	each declared component within its own locked content criterion, at the declared ratio	`124.67 mg of 120 mg declared (+3.9%), 3 of 3 components within criterion`	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

Layer Results

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1 Identity

LC-MS (ESI+)

3 of 3 components confirmed
each +/- 1 Da of its component mass

PASS

Component	Its criterion	Observed	Status
NAD+	663.43 Da · acceptance ±1 Da · average	663.321 Da	PASS
MOTS-c	2174.621 Da · acceptance ±1 Da · average	2174.511 Da	PASS
5-Amino-1MQ	159.212 Da · acceptance ±1 Da · average	159.077 Da	PASS

2 Purity

HILIC-CAD homogeneity (universal detection) + RP-HPLC 214 nm area% (USP <621>)

3 of 3 components within criterion
each component at or above its own locked purity criterion

PASS

Component	Its criterion	Observed	Status
NAD+	Expected Purity ≥ 99.25 area % · Acceptance NLT 99.25 area % · Units area % · Source Axiom Analytics SPEC-PURITY-001, Revision 1, effective 2026-08-31	99.97%	PASS
MOTS-c	Expected Purity ≥ 99.25 area % · Acceptance NLT 99.25 area % · Units area % · Source Axiom Analytics SPEC-PURITY-001, Revision 1, effective 2026-08-31	99.55%	PASS
5-Amino-1MQ	Expected Purity ≥ 99.25 area % · Acceptance NLT 99.25 area % · Units area % · Source Axiom Analytics SPEC-PURITY-001, Revision 1, effective 2026-08-31	99.97%	PASS

3 Net Peptide Content

Quantitative HPLC vs reference std

124.67 mg of 120 mg declared (+3.9%), 3 of 3 components within criterion
each component within its own locked content criterion, at the declared ratio

PASS

Component	Its criterion	Observed	Status
NAD+	10 parts · 90–110 mg · Declared blend recipe on the controlled Axiom catalog record for NAD+/MOTS-c/5-Amino-1MQ (component ratio 10); acceptance ±10% per Axiom SPEC-CONTENT-001	103.38 mg	PASS
MOTS-c	1 part · 9–11 mg · Declared blend recipe on the controlled Axiom catalog record for NAD+/MOTS-c/5-Amino-1MQ (component ratio 1); acceptance ±10% per Axiom SPEC-CONTENT-001	10.57 mg	PASS
5-Amino-1MQ	1 part · 9–11 mg · Declared blend recipe on the controlled Axiom catalog record for NAD+/MOTS-c/5-Amino-1MQ (component ratio 1); acceptance ±10% per Axiom SPEC-CONTENT-001	10.72 mg	PASS

Observed ratio **NAD+ 9.78 : MOTS-c 1.00 : 5-Amino-1MQ 1.01** against declared **NAD+ 10.00 : MOTS-c 1.00 : 5-Amino-1MQ 1.00** · source Declared blend recipe on the controlled Axiom catalog record for NAD+/MOTS-c/5-Amino-1MQ (component ratio 10); acceptance ±10% per Axiom SPEC-CONTENT-001

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**

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8 Fentanyl Screen

LC-MS/MS targeted adulterant screen

Not detected
detection limit 1 ng/mg

PASS

Analytes screened	**Fentanyl, Acetylfentanyl, Acrylfentanyl, Butyrylfentanyl, Carfentanil, Cyclopropylfentanyl, Furanylfentanyl, Methoxyacetylfentanyl, ortho-Fluorofentanyl, Valerylfentanyl, 4-ANPP**	Detection limit	**1 ng/mg**
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	**ed25519:5e113e723f319f138724272a...**
Technical Reviewer	**Michael Niles**	Reviewer Signature	**ed25519:7aec9091131ab50896d8da21...**
Laboratory Director	**Daniel Brennan**	Director Signature	**ed25519:37aa8531996f600d9dc56af9...**

Physical instrument analysis is performed 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: samples are analyzed under double-blind conditions, 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-2026-4349-8Q3B.

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

`SHA-384: 1ae5da9b250972248d84342c5dbb23084baed30125f487cfa523b01afd66ddf4...`

`Seal: ed25519:fcf07e388f9d6fa3fcf892002f47eab1d656754e...`

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