Axiom
ANALYTICS

CERTIFICATE OF ANALYSIS · 4X ESSENTIAL PANEL + 2 ADD-ON LAYERS (L5, L6)

Axiom Analytics Labs LLC
Sacramento, California, USA

AX-2026-4652-4UQR

ARA-290 · Lot GL-RA16MG-02-202611-001
Issued Nov 5, 2026 PT · v1
Verify: 9C33-1DE9-FBFD

SCAN TO VERIFY

PASS — ALL SPECIFICATIONS MET

6 of 6 layers complete

L1	L2	L3	L4	L5	L6
Identity	Purity	Net Peptide Content	Sterility	Bacterial endotoxin, USP <85> (kinetic chromogenic LAL)	Heavy Metals

Sample & Vial Validation



Vial A: as received & analyzed

MORE VIEWS OF VIAL A



Vial A · right

Brand	**Guardian Labs**	Product	**ARA-290**
Lot / Batch	**GL-RA16MG-02-202611-001**	Label Claim	**16 mg**
Matrix	**lyophilized powder**	Sample Count	**1**
Vial Size	**5mL**	Cap Color	**Misty Gray**
Crimp Color	**Silver / Aluminum**	Contents Color	**White**
Seal Intact	**Yes**	Condition	**sealed, intact**
Received	**Nov 4, 2026 PT**	Sampling	**client submitted**

Test Results

Test	Specification	Result	
Identity research screen	every vial within ±1 Da of 1257.324 Da	`1257.334 Da`	PASS
Purity research screen	≥ 99.25 area %	`99.66%`	PASS
Net Peptide Content research screen	every vial within ±10% of 16 mg	`Vial A: 16.82 mg`	PASS
Sterility · Rapid PCR research screen	Rapid PCR screen	`Target DNA not detected`	PASS
Endotoxin verified compendial	≤ 0.5 EU/mg (house limit; USP <85> method)	`0.229 EU/mg`	PASS
Heavy Metals research screen	ICH Q3D(R2) Table A.2.2, parenteral route	`All below limits`	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 Labs LLC
Sacramento, California, USA

AX-2026-4652-4UQR

ARA-290 · Lot GL-RA16MG-02-202611-001
Issued Nov 5, 2026 PT · v1
Verify: 9C33-1DE9-FBFD

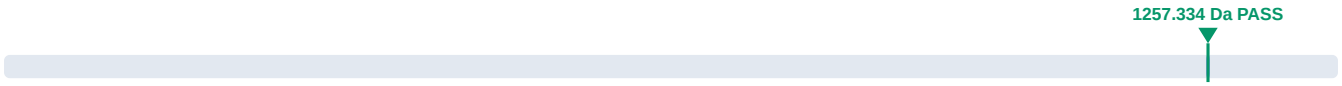
SCAN TO VERIFY

Layer Results

1 Identity
LC-MS (ESI+)

1257.334 Da — every vial within ±1 Da of 1257.324 Da — PASS

Theoretical mass	**1257.324 Da**	Acceptance	**within ±1 Da**
Vial A	**1257.334 Da · PASS**		



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

99.66% — ≥ 99.25 area % — PASS

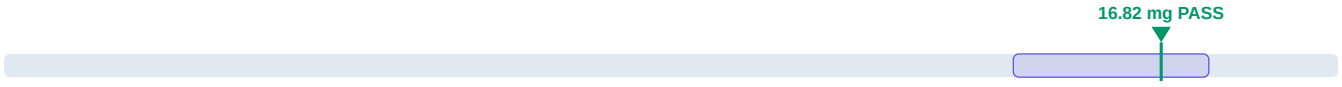
Acceptance	**≥ 99.25%**	Vial A	**99.66% · PASS**
Criterion source	**Axiom Analytics SPEC-PURITY-001, Revision 1, effective 2026-08-31**		



3 Net Peptide Content
Quantitative HPLC vs reference std

Vial A: 16.82 mg — every vial within ±10% of 16 mg — PASS

Target	**16 mg (±10%)**	Vial A	**16.82 mg · PASS**



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

Target DNA not detected — Rapid PCR screen — PASS

Run controls valid.

5 Endotoxin
Bacterial endotoxin, USP <85> (kinetic chromogenic LAL)

0.229 EU/mg — ≤ 0.5 EU/mg (house limit; USP <85> method) — PASS

Source container	**A**

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 Labs LLC
Sacramento, California, USA

AX-2026-4652-4UQR

ARA-290 · Lot GL-RA16MG-02-202611-001
Issued Nov 5, 2026 PT · v1
Verify: 9C33-1DE9-FBFD

SCAN TO VERIFY

6 Heavy Metals

ICP-MS (USP 232/233)

All below limits PASS

ICH Q3D(R2) Table A.2.2, parenteral route

Source container **A**

Element	Specification	Result	Status
Lead (Pb)	≤ 0.5 ppm (µg/g)	Not Detected	PASS
Arsenic (As)	≤ 1.5 ppm (µg/g)	Not Detected	PASS
Cadmium (Cd)	≤ 0.2 ppm (µg/g)	Not Detected	PASS
Mercury (Hg)	≤ 0.3 ppm (µg/g)	Not Detected	PASS
Cobalt (Co)	≤ 0.5 ppm (µg/g)	Not Detected	PASS
Vanadium (V)	≤ 1 ppm (µg/g)	Not Detected	PASS
Nickel (Ni)	≤ 2 ppm (µg/g)	Not Detected	PASS

Reporting Scope & Limitations

`[Sterility · Rapid PCR]` Rapid PCR screen for microbial DNA. It detects DNA from live and dead organisms and is not a USP <71> sterility test or a USP <61> count. Full USP <71> sterility testing is available as an add-on.

Digital Signatures

Analyst	**Alana Reeves**	Analyst Signature	**ed25519:4d6267f6a1f3b1888095d671...**
Technical Reviewer	**Michael Niles**	Reviewer Signature	**ed25519:70e624e9c01857c18c09c935...**
Laboratory Director	**Daniel Brennan**	Director Signature	**ed25519:f62d457b5f5a88897934691e...**

Testing is performed within Axiom's laboratory network under Axiom's methods. Every result is reviewed and released by Axiom, which issues and is responsible for this certificate. Axiom Analytics does not hold ISO/IEC 17025 accreditation. Samples are identified to the testing laboratory by an internal lot ID only. The method status of each result is shown beside it.

Each signature is an Ed25519 signature over the SHA-384 hash of this report. Scan the QR code or verify it yourself at https://axiomanalyticslab.com/verify/AX-2026-4652-4UQR.

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

SHA-384: da7e97ea5f6a238b11464f5a7104f6271b1a0ae19a6bc119d5e0971a4e6b672c...

Seal: ed25519:b1c2c42ada134b43cb9ea2ffccebb71762327059...

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.