

■ ALL LAYERS PASS

7 / 7 LAYERS COMPLETE

■ L1

PASS

■ L2

PASS

■ L3

PASS

■ L4

PASS

■ L5

PASS

■ L6

PASS

■ L7

PASS

Client & Sample

Client	Nova Peptides
Product	Tirzepatide
Lot Number	TZ-2026-X9
Client Label Claim	15 mg lyophilized powder
Matrix	lyophilized powder
Sample Count	3
Received	1/1/1970 · sealed, intact
Sampling	client submitted

CRYPTOGRAPHICALLY SEALED

SHA-384: 008fca1a0f2137a8b218b42b4931d518c5c6687ca5b7ef58...

Seal: ed25519:c283cf83aeb6daa619228f76042c3c5d73cd8156...

Quantitative Results

AX-2026-00001 · PAGE 2

Layer 1 - Chromatographic Purity (HPLC 214nm)

Purity **99.64% (limit 98%)**
Specification **internal screen**
Status **PASS**

Layer 2 - Molecular Identity (LC-MS/MS)

Theoretical [M+H]⁺ **4813.52 Da**
Observed [M+H]⁺ **4813.51 Da**
Mass Error **-0.010000000000218279 Da (limit ±1 Da)**
Interpretation **Identity consistent with expected mass**

Layer 3 - Net Peptide Content

Active Peptide Mass **15.12 mg (target 15 mg, 0.7999999999999948% var.)**

Vial	mg
A	15.17
B	15.09
C	15.129999999999999
Mean ± SD	15.13 ± 0.04 (CV 0.3%)

Safety, Microbial & Method Status

AX-2026-00001 · PAGE 3

Layer 4 - Bacterial Endotoxin (USP <85>)

Observed **0.02 EU/mg (limit 6.5 EU/mg)**

Layer 5 - Elemental Impurities (ICP-MS)

Element	Observed (ppb)	Limit (ppb)	Status
Lead (Pb)	0.12	10	PASS
Arsenic (As)	0.05	15	PASS
Cadmium (Cd)	0	5	PASS
Mercury (Hg)	0.01	3	PASS

Layer 6 - Microbial Quality

Method **Rapid molecular microarray screen (NOT USP <71>)**

Result **0 CFU (limit 10)**

Note: This is a rapid molecular screen, not a USP <71> sterility test.

Layer 7 - Post-Reconstitution Stability

pH **6.82 (target 6.50 - 7.40)**

Clarity **CLEAR**

Degradation 24h **0.4%**

Method Status & Review

Layer	Method	Status
L1 Homogeneity Profiling	RP-HPLC 214nm (USP <621>)	validated in house
L2 Molecular Mass Fingerprinting	LC-MS/MS (ESI+)	validated in house
L3 Net Peptide Mass Quantitation	Quantitative HPLC vs reference std	validated in house
L4 Bacterial Endotoxin	Kinetic chromogenic LAL	verified compendial
L5 Elemental Catalytic Sweep	ICP-MS (USP <232>/<233>)	verified compendial
L6 Microbial Quality	Rapid molecular microarray screen	research screen
L7 Post-Reconstitution Stability	Forced-degradation stability	research screen

Analyst **Dr. Marcus Vance**

Technical Reviewer **Dr. Marcus Vance**

Released **6/25/2026, 1:06:16 AM**

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.