Gold Standard Analytics

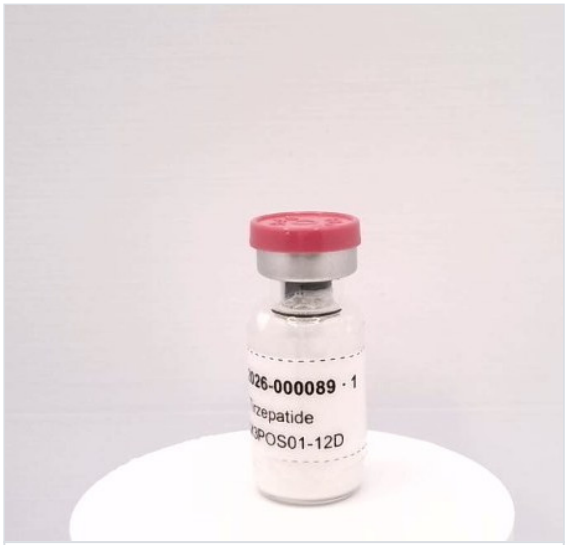
Gold Standard Analytics LLC, Houston, TX

CERTIFICATE OF ANALYSIS

Report GSA-COA-000089-08901-20261118-3 · issued Nov 19, 2026

Ryan Cox

PRODUCT	ORDER	SAMPLE
Tirzepatide	GSA-2026-000089	089-01
LOT	**ISSUED**	
M3POS01-12D	Nov 19, 2026	



THE SAMPLE AS RECEIVED

IDENTITY

Tirzepatide

confirmed by mass and retention time

PURITY

100 %

HPLC-UV, 214 nm

IMPURITY ANALYSIS

None above 0.3 %

no peak other than tirzepatide above the reporting limit

NET CONTENT

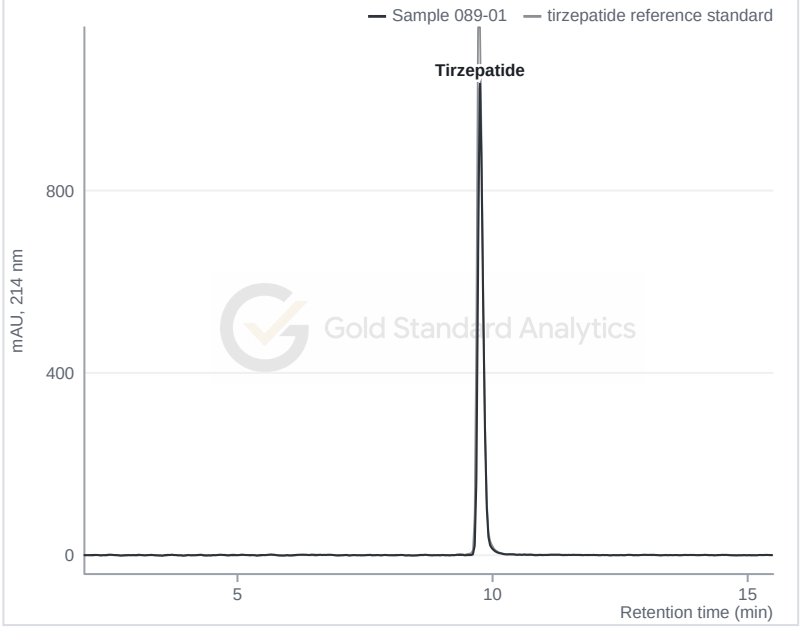
26.6 mg

per vial; 89 % of 30 mg declared

Bacterial endotoxins Pass; spike recovery 69 % — **< 0.050 EU/mL**

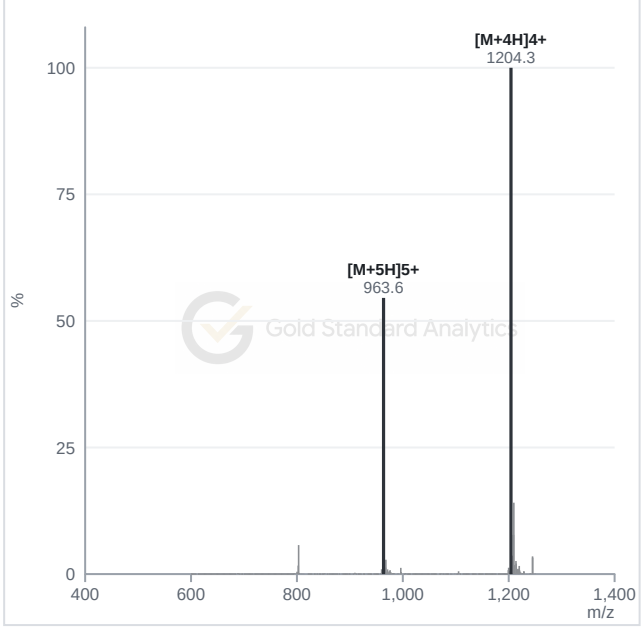
HPLC CHROMATOGRAM

UV, 214 nm



MASS SPECTRUM

at the tirzepatide peak (9.75 min)



RELEASED BY

Ian Ebert
Laboratory Director · Nov 19, 2026

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Results are not covered by ISO/IEC 17025 accreditation. Results relate only to the sample as received and tested.

The sample

Order GSA-2026-000089 · Sample 089-01 · Ryan Cox

Customer	**Ryan Cox**	Lot	**M3POS01-12D**
Order	**GSA-2026-000089**	Prepared	**18 Nov 2026**
Sample	**089-01**	Tested	**18 Nov 2026**
Label	**No manufacturer label (clear vial, red cap); declared tirzepatide 30 mg**	Tests	**Identity, Purity, Impurity breakdown, Net content, Bacterial endotoxins**

Graphs

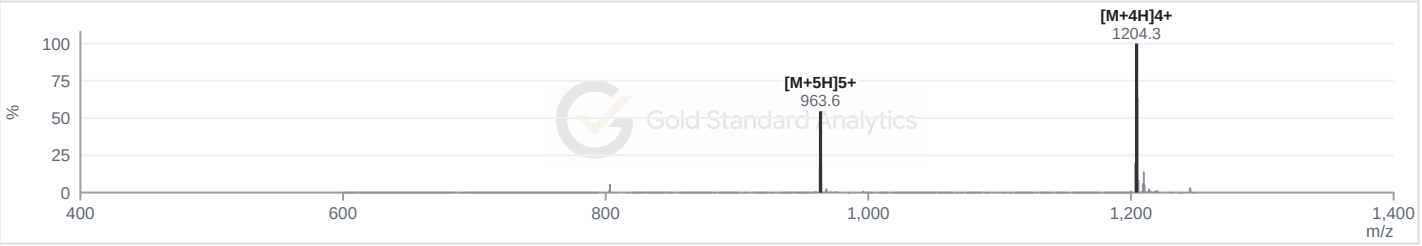
HPLC CHROMATOGRAM

HPLC chromatogram (UV, 214 nm) · mAU, 214 nm against Retention time (min)



MASS SPECTRUM

Mass spectrum at the tirzepatide peak (9.75 min) · Counts against m/z



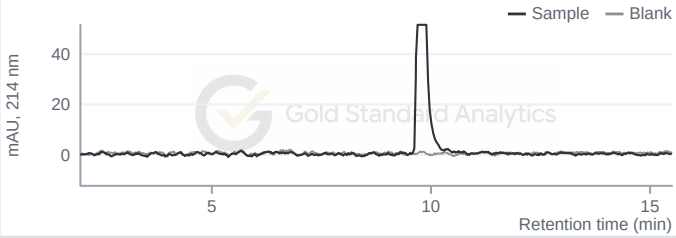
Results

Identity	**Consistent with tirzepatide.** In both vials the main peak at 9.75 min carries tirzepatide's 4+ and 5+ ions (m/z 1204.3 and 963.6; molecular mass 4,813.1, expected 4,813.5) and elutes within 0.2 % of a tirzepatide reference standard run in the same sequence (9.74 min).
Purity	**100 %** by HPLC with UV detection at 214 nm, in both vials: no other peak was found above the reporting limit (about 0.3 % of the tirzepatide peak height).
Net content	**26.6 mg per vial** (89 % of the 30 mg declared), measured against a tirzepatide reference standard run in the same sequence; the mean of the 214, 220 and 280 nm readings, which agree within 1.3 %.
Bacterial endotoxins	**< 0.050 EU/mL; spike recovery 69%** . Pass.

Zoomed views

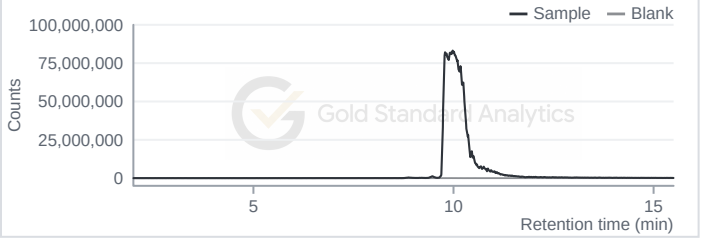
HPLC, SMALL PEAKS

Zoomed in on the small peaks (5 % of the main peak) · mAU, 214 nm against Retention time (min)



ION TRACE

Ion trace, m/z 1204.4 (tirzepatide 4+): sample vs blank · Counts against Retention time (min)



Impurities

Every UV peak above the reporting limit was tirzepatide.

Amounts are each peak's share of the total UV peak area at 214 nm.

How it was tested

Liquid chromatography with UV and mass-spectrometry detection: Agilent 1290 Infinity II LC with a 6490 triple-quadrupole mass spectrometer. Column Polaris C18-A, 2.0 x 150 mm, 55 °C; water and acetonitrile, each with 0.1 % formic acid. Identity: molecular mass from the multiply charged ions in the mass spectrum, and retention time against a tirzepatide reference standard run in the same sequence. Purity: UV peak area at 214 nm, after subtracting a blank run in the same sequence; each vial injected once. 2 µL injected; autosampler at 12 °C. Net content: UV peak area against a tirzepatide reference standard run in the same sequence, scaled by the volumes used: the whole vial dissolved in 3.0 mL, and 0.10 mL of that diluted to 1.0 mL. Bacterial endotoxins: endotoxin reader, 0.050 EU/mL limit; result reported as printed by the reader, with spike recovery.

Notes

Results apply only to the sample as received and tested.

Release

This report is signed electronically at release. The signature is printed on page 1, and the release record, added as the last page, gives the date and the verification code.

Gold Standard Analytics

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Release record

Report GSA-COA-000089-08901-20261118-3 · Certificate GSA-2026-161208

Customer and order	Ryan Cox · GSA-2026-000089
Sample and report	089-01 · Tirzepatide Certificate of Analysis
Report reference	GSA-COA-000089-08901-20261118-3
Certificate accession	GSA-2026-161208
Released and signed by	Ian Ebert, Laboratory Director
Date and time (UTC)	2026-11-19 20:37:53Z
Signature meaning	Approved for release. The signer reviewed this report and approved its release to its customer.
Approval reference	ac559871-78fc-4806-abec-a4d84b29edb2
Electronic signature	Signed electronically in a signed-in GSA staff account.
Original report SHA-256	c2093b9fb895c9884ff06144060333da0b85a231a98a3e3c620fab241f0cd549
Verify this certificate	https://goldstandardanalytics.com/coa/GSA-2026-161208

Scan to view this certificate online

Signature

Ian Ebert, Laboratory Director

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