Gold Standard Analytics

Gold Standard Analytics LLC, Houston, TX

CERTIFICATE OF ANALYSIS

Report GSA-COA-000082-08201-20261117 · issued Nov 18, 2026

Ben Young

PRODUCT	ORDER	SAMPLE
Tirzepatide (as labelled)	GSA-2026-000082	082-01
LABEL	**LOT**	**ISSUED**
Tirzepatide 30 mg	TR30 10.6.2026	Nov 18, 2026



THE SAMPLE AS RECEIVED

IDENTITY

Not detected

no tirzepatide found

MAIN COMPONENT

Mass 136

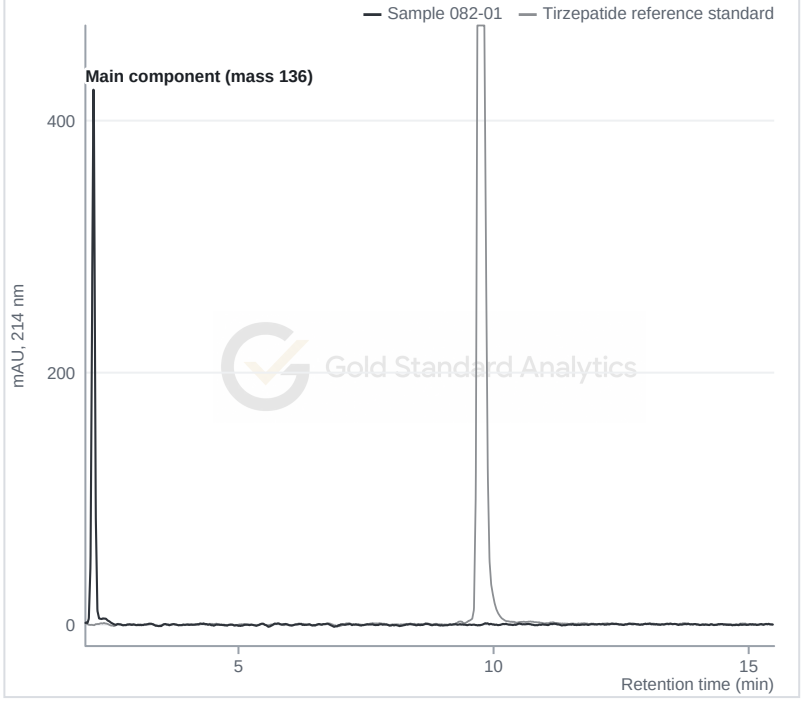
consistent with 4'-hydroxyacetophenone

MAIN COMPONENT SHARE

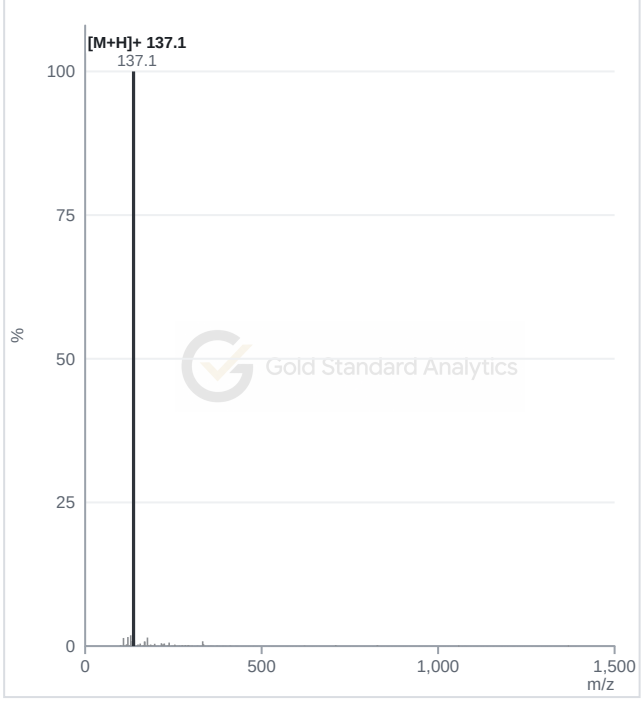
100 %

of the UV peak area at 214 nm

HPLC CHROMATOGRAM — UV, 214 nm



MASS SPECTRUM — main component (11.91 min, second method)



RELEASED BY

Ian Ebert

Laboratory Director · Nov 19, 2026

Scan to verify

goldstandardanalytics.com/coa/

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

The sample

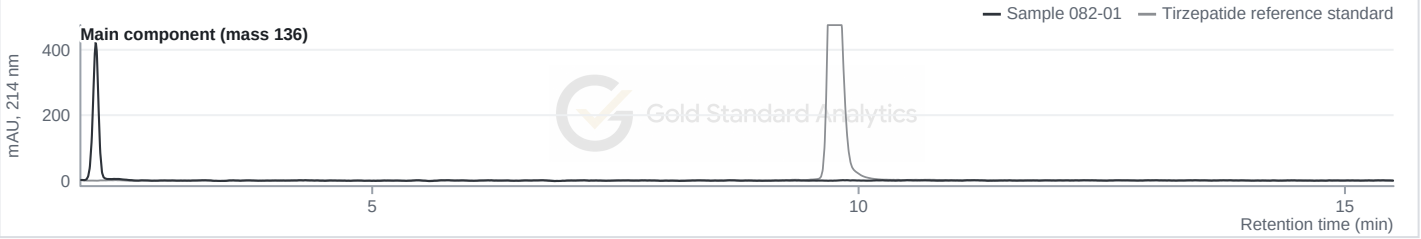
Order GSA-2026-000082 · Sample 082-01 · Ben Young

Customer	**Ben Young**	Lot	**TR30 10.6.2026**
Order	**GSA-2026-000082**	Prepared	**16 Nov 2026**
Sample	**082-01**	Tested	**17 Nov 2026**
Label	**Tirzepatide 30 mg**	Tests	**Identity, Purity, Impurity breakdown, Net content**

Graphs

HPLC CHROMATOGRAM

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



MASS SPECTRUM

Mass spectrum of the main component (11.91 min, second method) · Counts against m/z



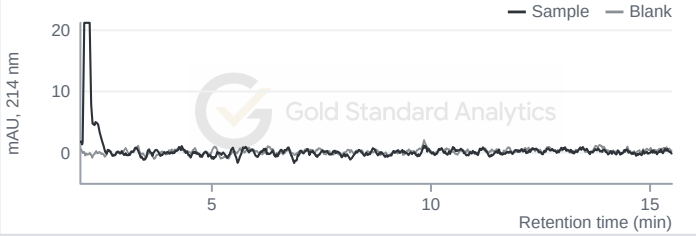
Results

Identity	**Tirzepatide not detected.** The sample shows no peak at tirzepatide's retention time (9.73 min for a tirzepatide reference standard run in the same sequence) and none of its ions (m/z 1204.4, 963.7 and 803.3 for its 4+, 5+ and 6+ forms) above the level of a blank injected after the reference standard.
Main component	**A small molecule of mass 136, consistent with 4'-hydroxyacetophenone** (C8H8O2). It gives the main UV peak (2.16 min on this method; 11.91 min on a second, slower method), with its protonated molecule at m/z 137.1 and strong absorbance at 280 nm, as an aromatic ketone shows. It makes up 100 % of the UV peak area at 214 nm on this method: no other peak was found above the reporting limit (about 0.5 % of its peak height). This is a share of the UV signal, not a percentage by weight. No reference sample of 4'-hydroxyacetophenone was injected, so close positional isomers are not fully excluded.
Purity, impurities, content	Not reported: no tirzepatide was found to measure.

Zoomed views

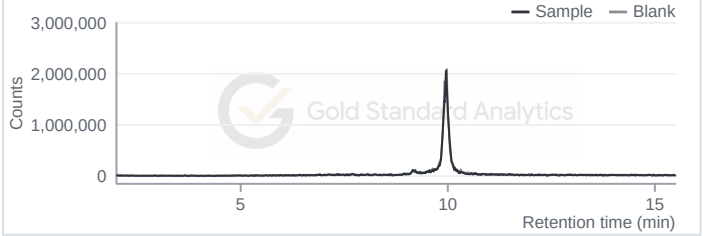
HPLC, SMALL PEAKS

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)



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: retention time and molecular mass against a tirzepatide reference standard run in the same sequence; 2 µL injected, autosampler at 12 °C. A second injection (1 µL) on a slower gradient, scanned to m/z 1400, identified the main component by its mass and UV absorbance.

Notes

Results apply only to the sample as received and tested. The main component is assigned by its mass and UV absorbance only.

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-000082-08201-20261117 · Certificate GSA-2026-896408

Customer and order	Ben Young · GSA-2026-000082
Sample and report	082-01 · Tirzepatide (as labelled) Certificate of Analysis
Report reference	GSA-COA-000082-08201-20261117
Certificate accession	GSA-2026-896408
Released and signed by	Ian Ebert, Laboratory Director
Date and time (UTC)	2026-11-19 20:28:36Z
Signature meaning	Approved for release. The signer reviewed this report and approved its release to its customer.
Approval reference	de83ea11-ee9e-42f4-9d81-b11f60330698
Electronic signature	Signed electronically in a signed-in GSA staff account.
Original report SHA-256	c191a7ae8654007131d28b15e85cab87e943101394729d06e4fe7c36b15580d7
Verify this certificate	https://goldstandardanalytics.com/coa/GSA-2026-896408

Scan to view this certificate online

Signature

Ian Ebert, Laboratory Director