

## Analysis Report

Official laboratory analysis summary for the submitted sample and associated quality-control review.

SAMPLE <b>Tirzepatide</b>	RECEIVED DATE <b>May 18, 2026</b>	ANALYSIS DATE <b>May 22, 2026</b>	REPORT GENERATED <b>May 25, 2026</b>
STRENGTH <b>10mg</b>	MANUFACTURER <b>PepticoresAminos</b>	BATCH NUMBER <b>PC-TZ10-0526E</b>	LAB CODE <b>673-1</b>
CLIENT <b>www.pepticoresaminos.us</b>			

## SAMPLE INFORMATION

## Tirzepatide

**10MG**FORM **White lyophilized powder in a glass vial**SAMPLE SUBMISSION **Sample provided by customer**BATCH **PC-TZ10-0526E**CAP / CRIMP COLOR **Black/Silver**RECEIVED DATE **May 18, 2026**

SAMPLE IMAGE

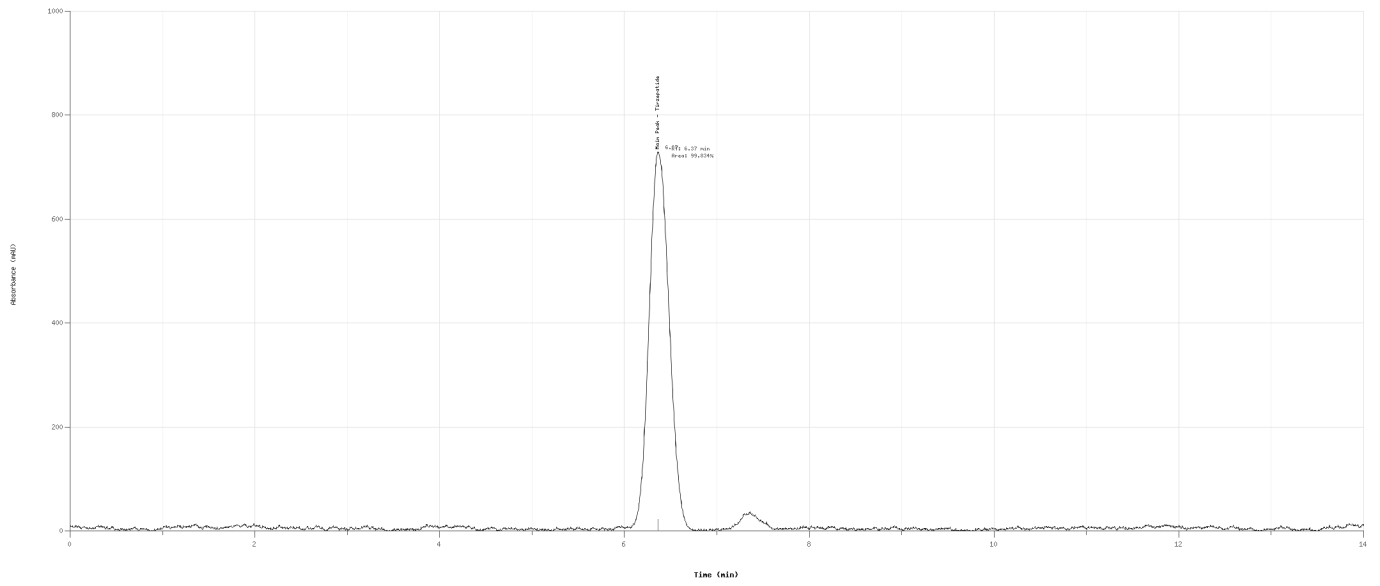
## ANALYTICAL SUMMARY

IDENTITY	<b>Tirzepatide</b>
PURITY	<b>99.834%</b>
QUANTITY	<b>10.08mg</b>
BATCH	<b>PC-TZ10-0526E</b>
MANUFACTURER	<b>PepticoresAminos</b>

# RP-HPLC-UV CHROMATOGRAM (220 NM)

Detection: UV 220 nm | Runtime: 14.0 min

Sample ID: Tirzepatide  
Report ID: 2024-03-08-000007  
Method: RP-HPLC-UV Long Peptide  
Detector: UV 220 nm | Runtime: 14.0 min



## METHOD

TIME	H2O + 0.1% TFA	ACN + 0.1% TFA
0min	90%	10%
2min	90%	10%
10min	8%	92%
12min	8%	92%
14min	8%	92%

## TECHNICAL NOTE

Analysis performed by RP-HPLC-UV at 220 nm using a gradient elution program. Total runtime: 14.0 minutes.

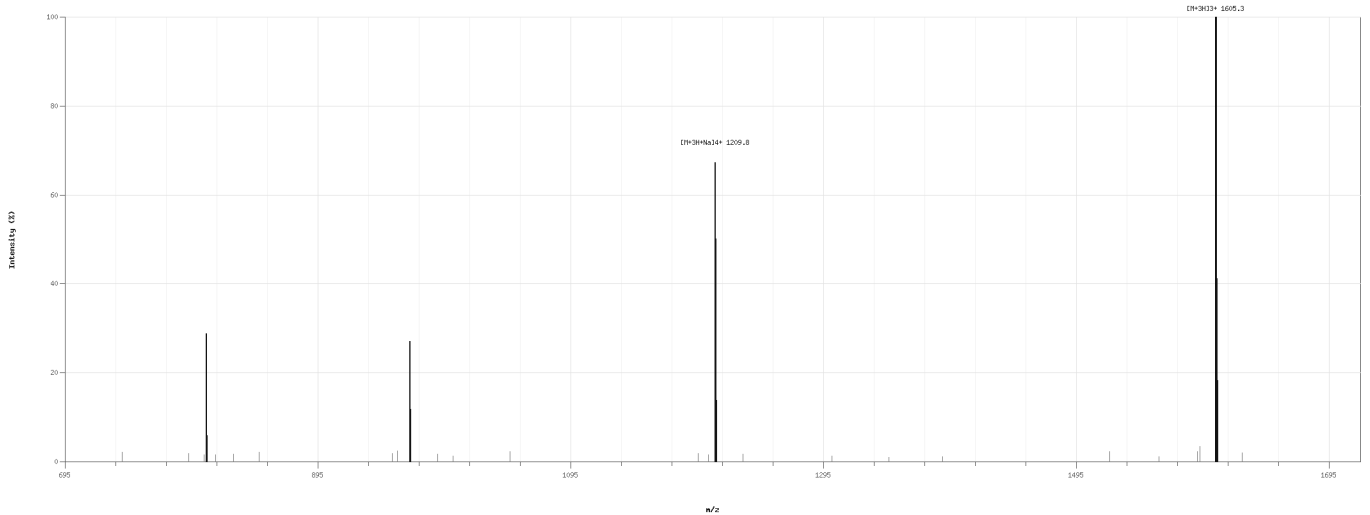
## COMMENTS

The sample meets the defined analytical specifications for identity, purity and impurity profile based on the applied RP-HPLC-UV evaluation.

## LC-MS MASS SPECTRUM

Sample: Tirzepatide  
 Report ID: 278-2025-04857  
 Reference MW: 4833.6 Da  
 Ionization: ESI+

Acquisition: LC-MS  
 Profile: Total Ion Chromatogram



The recorded mass spectrum shows signals compatible with the expected molecular profile of the sample.

## ANALYSIS & METHODOLOGY

### STANDARD PEPTIDE PURITY, MASS & ADDITIONAL TESTING

Analysis performed using RP-HPLC-UV under validated laboratory conditions. Peak profile, retention behavior and purity response were evaluated against internal reference standards.

## BIOBURDEN

TEST	RESULT	UNIT	REPORTING LIMIT
<b>Total Aerobic Microbial Count</b> USP <61>/Eur. Ph. 2.6.12. Plate Count Method	Not detected	CFU/g	>= 1000
<b>Total Yeast and Mold Count</b> USP <61>/Eur. Ph. 2.6.12. Plate Count Method	Not detected	CFU/g	>= 100

## ENDOTOXIN ANALYSIS

TEST	RESULT	UNIT	REPORTING LIMIT
<b>Bacterial Endotoxin</b> USP<85>/ Eur. Ph. 2.6.14. Bacterial Endotoxin Chromogenic Test	< 0.001	EU/mg	> 0.5

## HEAVY METALS

TEST	RESULT	UNIT	REPORTING LIMIT
<b>Arsenic</b> Elemental Impurities Screening	Not detected	ppm	>= 1.5
<b>Cadmium</b> Elemental Impurities Screening	Not detected	ppm	>= 0.5
<b>Cobalt</b> Elemental Impurities Screening	Not detected	ppm	>= 25
<b>Lead</b> Elemental Impurities Screening	Not detected	ppm	>= 1.5

TEST	RESULT	UNIT	REPORTING LIMIT
<b>Nickel</b> Elemental Impurities Screening	<b>Not detected</b>	<b>ppm</b>	<b>&gt;= 25</b>
<b>Quicksilver</b> Elemental Impurities Screening	<b>Not detected</b>	<b>ppm</b>	<b>&gt;= 1.5</b>
<b>Vanadium</b> Elemental Impurities Screening	<b>Not detected</b>	<b>ppm</b>	<b>&gt;= 25</b>

## TECHNICAL APPENDIX

This appendix documents the analytical methodology, instrumentation and acceptance criteria applied for the evaluation of the sample.

## COMPOUND REFERENCE

PARAMETER	TIRZEPATIDE
<b>PUBCHEM CID</b>	166567236
<b>CAS</b>	2023788-19-2
<b>MOLECULAR FORMULA</b>	C225H348N48O68
<b>MOLECULAR WEIGHT</b>	4813.0 g/mol

## METHOD SPECIFICATION

PARAMETER	LONG PEPTIDE EXTENDED RP-HPLC-UV METHOD
<b>ANALYTICAL MODE</b>	Extended gradient RP-HPLC-UV peptide purity screen
<b>COLUMN</b>	C18 peptide column, extended-gradient configuration
<b>MOBILE PHASE A</b>	Water + 0.1% TFA
<b>MOBILE PHASE B</b>	Acetonitrile + 0.1% TFA
<b>FLOW RATE</b>	0.7 mL/min
<b>DETECTION</b>	UV 220 nm
<b>INJECTION VOLUME</b>	10 uL
<b>RUNTIME</b>	14.0 min
<b>SAMPLE DILUENT</b>	Water/acetonitrile compatible diluent
<b>SAMPLE PREPARATION</b>	Diluted to method range and clarified before injection

## INSTRUMENT PLATFORM

PARAMETER	HIGH-RESOLUTION UPLC/HPLC-UV PLATFORM
<b>SYSTEM TYPE</b>	High-resolution LC platform
<b>DETECTOR</b>	UV/VIS detector
<b>ACQUISITION</b>	Chromatographic acquisition and integration software
<b>REVIEW MODE</b>	Gradient profile review with peak integration

PARAMETER	HIGH-RESOLUTION UPLC/HPLC-UV PLATFORM
WORKFLOW NOTE	Used for long peptide and multi-component profile review

## ANALYTICAL CRITERIA

PARAMETER	ACCEPTANCE FRAMEWORK	BASIS
IDENTITY	Retention-time and profile agreement with reference expectations	Chromatographic identity review
PURITY	NLT 98.0% unless a stricter report-specific specification is declared	Integrated RP-HPLC-UV purity profile
QUANTITY	Measured content reviewed against the declared sample strength	Report-level analytical summary
BIOBURDEN	Not detected or within stated reporting limits	Microbial screening table
ENDOTOXIN	Below stated reporting limit / internal screening threshold	Endotoxin analysis table
HEAVY METALS	Below individual reporting limits where screened	Elemental impurities screening table

This appendix documents the analytical methodology, instrumentation and acceptance criteria applied for the evaluation of the sample.

## VERIFICATION

Verify this report through the official Synaptica Analytics verification page using the details below.

**Verification URL** [synaptica-labs.com/verify-report](https://synaptica-labs.com/verify-report)

**Report ID** SYN-2026-004957

**Verification Key** VK-PH9R-LV2J

SCAN TO VERIFY



## DIGITAL SIGNATURE



**DIGITALLY SIGNED BY:**

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Analysis date: May 22, 2026

Report generated: May 25, 2026

Analytical testing performed by Synaptica Analytics -

Analytical Services Division

Synaptica Analytics  
**SYN-2026-004957**  
Laboratory Analysis Report  
**VK-PH9R-LV2J**

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