Synaptica Analytics

Independent Laboratory Analysis Report

OFFICIAL ANALYTICAL DOCUMENT

REPORT ID
SYN-2026-004893

Analysis Report

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

SAMPLE	RECEIVED DATE	ANALYSIS DATE	REPORT GENERATED
Tirzepatide	Apr 23, 2026	Apr 28, 2026	Apr 29, 2026

STRENGTH	30mg	MANUFACTURER	PepticoreAminos
BATCH NUMBER	PC-TZ30-0426A	LAB CODE	984-1
CLIENT	www.pepticoreaminos.net		

SAMPLE INFORMATION

Tirzepatide

30MG

FORM	White powder in a glass vial
SAMPLE SUBMISSION	Sample provided by customer
BATCH	PC-TZ30-0426A
CAP / CRIMP COLOR	Orange/silver
RECEIVED DATE	Apr 23, 2026



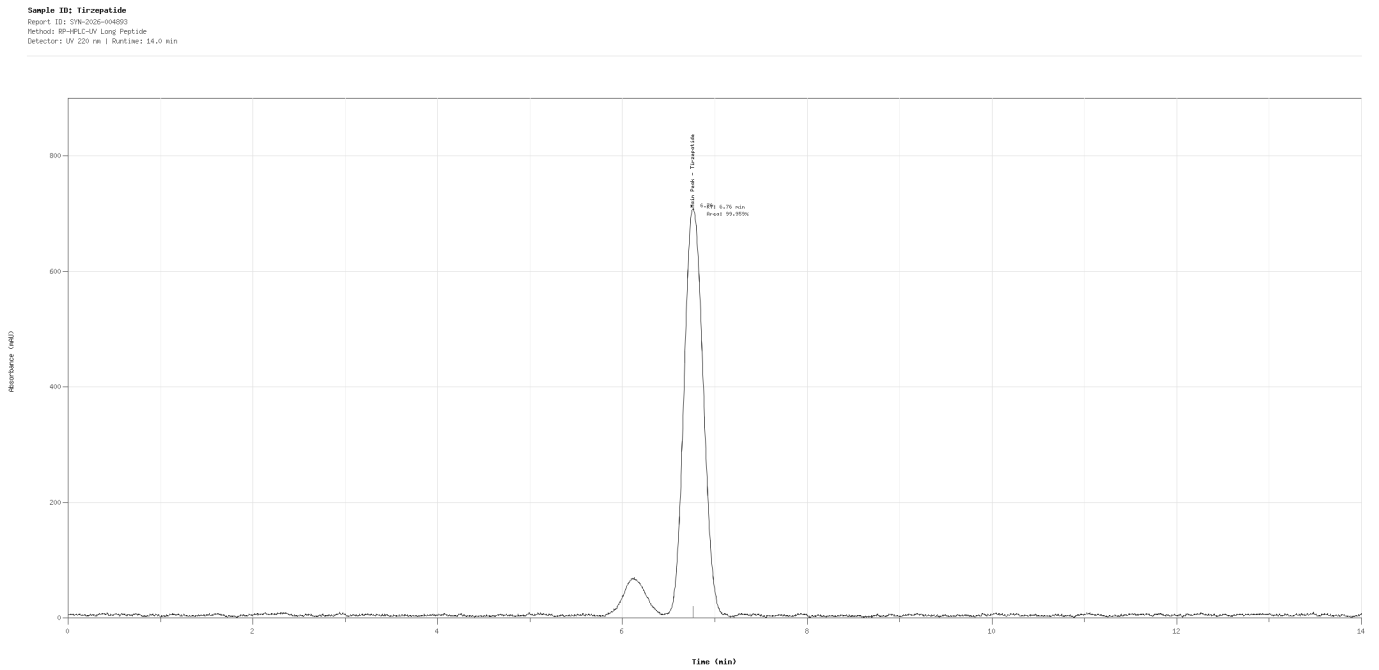
SAMPLE IMAGE

ANALYTICAL SUMMARY

IDENTITY	Tirzepatide
PURITY	99.959%
QUANTITY	34.69mg
BATCH	PC-TZ30-0426A
MANUFACTURER	PepticoreAminos

RP-HPLC-UV CHROMATOGRAM (220 NM)

Detection: 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%

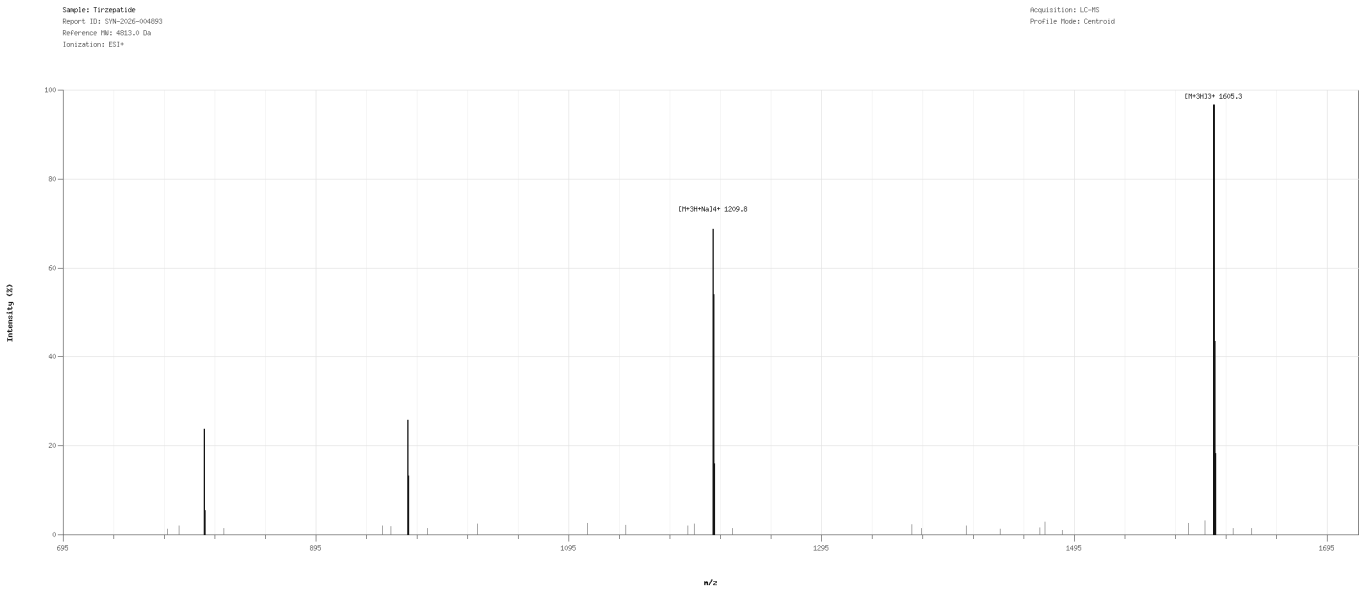
TECHNICAL NOTE

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

COMMENTS

The submitted sample meets the defined analytical specifications for identity, purity and impurity profile according to the applied RP-HPLC-UV method.

LC-MS MASS SPECTRUM



Charge-state distribution and isotope clustering are consistent with the expected analytical mass response.

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
Total Aerobic Microbial Count USP <61>/Eur. Ph. 2.6.12. Plate Count Method	**Not detected**	**CFU/g**	**>= 1000**
Total Yeast and Mold Count USP <61>/Eur. Ph. 2.6.12. Plate Count Method	**Not detected**	**CFU/g**	**>= 100**

ENDOTOXIN ANALYSIS

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

HEAVY METALS

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

TEST	RESULT	UNIT	REPORTING LIMIT
Nickel Elemental Impurities Screening	**Not detected**	**ppm**	**>= 25**
Quicksilver Elemental Impurities Screening	**Not detected**	**ppm**	**>= 1.5**
Vanadium Elemental Impurities Screening	**Not detected**	**ppm**	**>= 25**

TECHNICAL APPENDIX

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

COMPOUND REFERENCE

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

METHOD SPECIFICATION

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

INSTRUMENT PLATFORM

PARAMETER	HIGH-RESOLUTION UPLC/HPLC-UV PLATFORM
SYSTEM TYPE	High-resolution LC platform
DETECTOR	UV/VIS detector
ACQUISITION	Chromatographic acquisition and integration software
REVIEW MODE	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

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VERIFICATION

Verify this report through the official Synaptica Analytics verification page using the details below.
Verification URL synaptica-labs.com/verify-report
Report ID SYN-2026-004893
Verification Key VK-DZZZ-4MGY

SCAN TO VERIFY

DIGITAL SIGNATURE



DIGITALLY SIGNED BY:
Martin Saar
Date: 2026.04.29
10:50:50 +02'00'
Director