Certificate of Analysis

ILS Laboratories
8222 Vickers St, Suite 106, San Diego, CA 92111
(619) 329-3999 | ils-lab.com

Tirzepatide - 20mg

Tested for: px1 research
PX1RESEARCH.COM

PASS

COA #:	**COA-2026--SH8M-**	Analysis Date:	**07/31/2026**
Lot Number:	**PX1T20-0021**	Appearance:	**Good**
Accession #:	**ACC-2026-11958**	Sample Matrix:	**Lyophilized**
Labeled Content:	**20mg**	Volume:	**3mL**
		Date Received:	**07/22/2026**

Scan to verify authenticity at ils-lab.com
Access Code: AG5ZQTWP

Method: **Full QC Panel**

Identity	Peptide Purity	
Tirzepatide	**99.89%**	**Fentanyl Free**

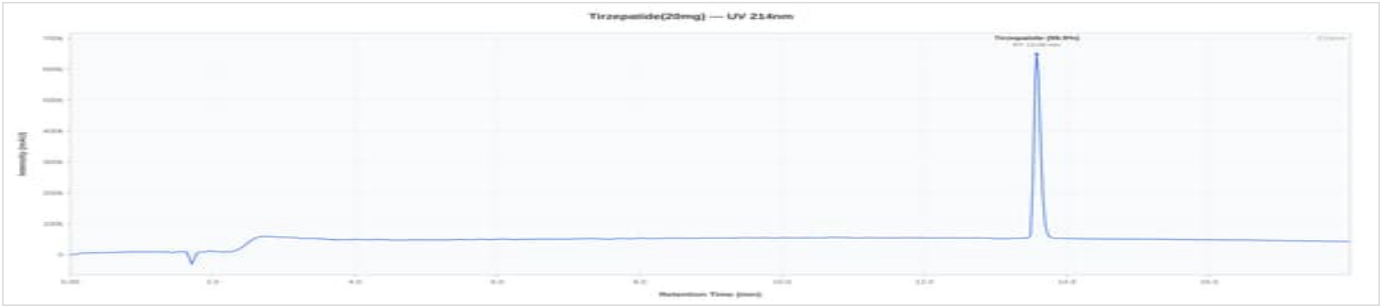


Tirzepatide 20mg - PX1T20-0021

Full QC Panel

Analyte	Specification	Result	Unit	Status
Peptide Purity (HPLC)	>= 95.0%	**99.89%**	%	**PASS**
Net Peptide Content	Report Only	**21**	mg	N/A
Identity (HPLC-RTM)	Tirzepatide	**Confirmed**	-	**PASS**
Fentanyl Screen	Immunoassay, 50 ng/mL cutoff	**Not Detected**	-	**PASS**

HPLC Chromatogram



Tirzepatide 20mg - PX1T20-0021: UV Chromatogram

Heavy Metals Analysis (ICP-MS)

Test	Specification	Result	Status
Arsenic (As)	NMT 1.5 ppm	0.115	**PASS**
Cadmium (Cd)	NMT 0.5 ppm	*Not Detected*	**PASS**
Lead (Pb)	NMT 1 ppm	0.07	**PASS**
Mercury (Hg)	NMT 1.5 ppm	0.068	**PASS**
Chromium (Cr)	NMT 10 ppm	0.329	**PASS**

Dr. Greg Kalyuzhny
Lab Director
7/31/2026

COA #: **COA-2026--SH8M-**
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Verify: portal.ils-lab.com/verify/Nagoc5W-MAUV5xBm
Issued: 7/31/2026

Sterility Testing (PCR)

Test	Specification	Result	Status
Sterility (PCR)	No Growth	**No Growth**	**PASS**

Endotoxin Testing (USP <85>)

Test	Specification	Result	Status
Endotoxin (USP <85>)	NMT 0.05 EU/mL	**NMT 0.05 EU/mL**	**PASS**
Acceptance criteria: NMT 0.05 EU/mL per client specification.			

Notes & Methodology

1. Date Tested: 07/31/2026. Methods: Full QC Panel.
2. The sample was confirmed to be Tirzepatide by HPLC. Identification by chromatographic retention time comparison with a reference standard.
3. Elemental impurities analyzed by ICP-MS per USP <233> methodology. Acceptance criteria are internal laboratory quality screening limits for research-use materials and do not represent evaluation against any specific pharmacopeial monograph or product specification.
4. Endotoxin tested per USP <85> kinetic turbidimetric method. Acceptance criteria per client specification.
5. Peptide purity determined by RP-HPLC area normalization at 214 nm. Value represents the percentage of the target peptide relative to all peptide-related peaks. Non-peptide process-related impurities, if detected, are excluded from the calculation.

Dr. Greg Kalyuzhny
Lab Director
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