



Note: This industrial Certificate of Analysis (COA) is prepared for industrial/commercial use. It is not intended for consumers and does not address consumer use of this product. For information regarding consumer use and applications of this product, please refer to the product label.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: TIRZEPATIDE PEN INJECTOR
PRODUCT CODE: N/A
PRODUCT USE: GLUCAGON-LIKE PEPTIDE-1
COUNTRY OF ORIGIN: U.S.A.

COMPANY: RAPHA PHARMACEUTICALS, INC.
ADDRESS: 7208 W. SAND LAKE RD., SUITE 305, ORLANDO, FL 32819 USA
PHONE: 407-362-7638

SECTION 1 NOTES: TIRZEPATIDE 12MG LOT#: TIR12RPNOV25
TIRZEPATIDE 24MG LOT#: TIR24RPNOV25
TIRZEPATIDE 36MG LOT#: TIR36RPNOV25
TIRZEPATIDE 48MG LOT#: TIR48RPNOV25
TIRZEPATIDE 54MG LOT#: TIR54RPNOV25
TIRZEPATIDE 64MG LOT#: TIR64RPNOV25

SECTION 2: HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC) UV AND RESULTS

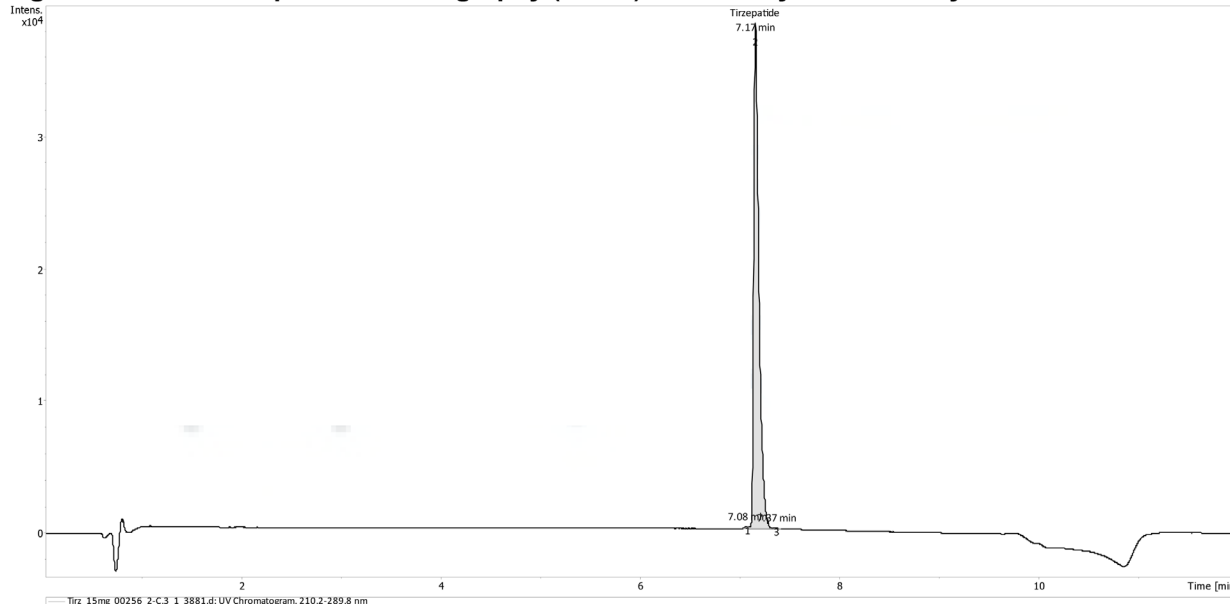
PHYSICAL & CHEMICAL PROPERTIES:

Compound:
Lot Number:
Analysis Date:
Purity %:
Method:

SPECIFICATIONS

Tirzepatide
Export Lot Production
2025-11-17
99.76%
HPLC-UV-MS

High Performance Liquid Chromatography (HPLC) UV – Purity and Quantity Test



PEAK LIST

	Time (min)
1	7.08
2	7.17
3	7.37

NUMBER OF DETECTED PEAKS: 3

Area	%Area	
2.02E+02	0.15	
1.37E+05	99.76	Tirzepatide
1.24E+02	0.09	

Quantification by HPLC-UV

Measured quantity : 21.06 mg/vial

SECTION 2 NOTES: * Injectable peptides may contain salts and sugars to aid in solubility and act as pH buffers. These are not normally detected using UV and are not considered impurities.

CERTIFICATE OF ANALYSIS

NAME OF PRODUCT: TIRZEPATIDE PEN INJECTOR

COA DATE: 11/17/2025

SECTION 3: MASS SPECTROMETRY (MS) IDENTITY TEST AND RESULTS

MASS SPECTROMETRY (MS) – IDENTITY TEST

Identity confirmed using HPLC-MS

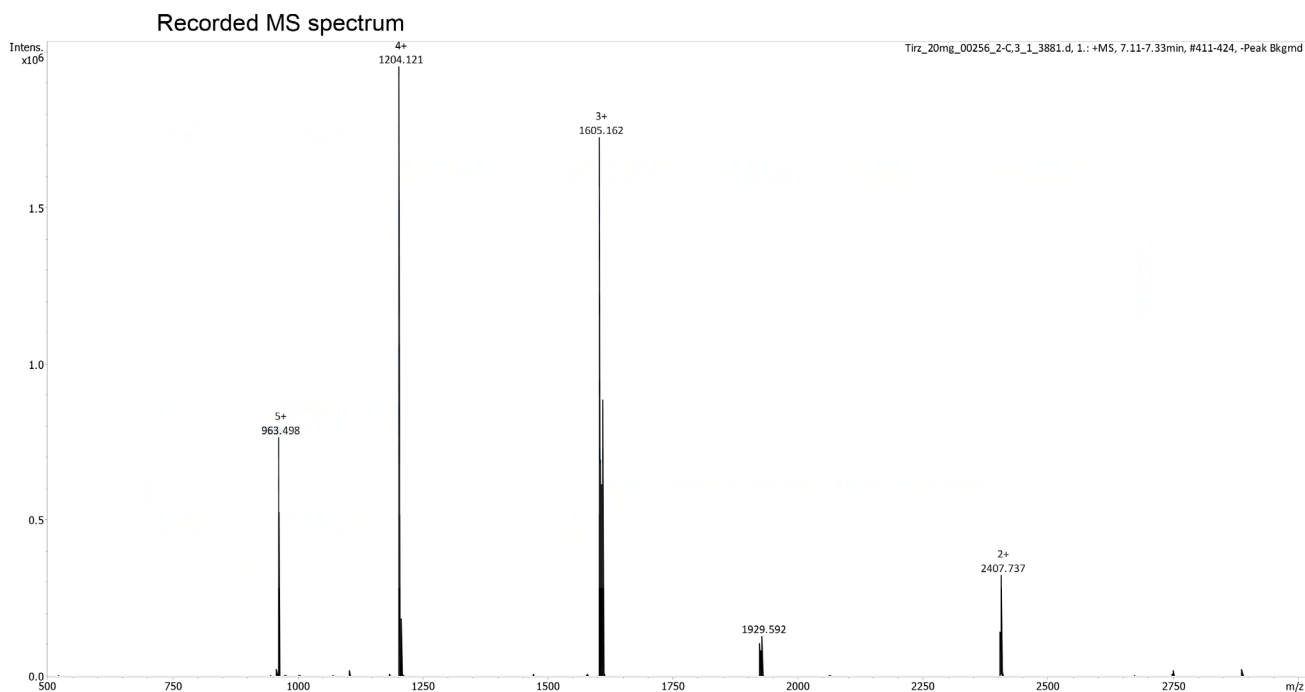
Molecular weight calculated using monoisotopic m/z values from mass spectrum

Expected monoisotopic mass: 4810.52 Da

Measured monoisotopic mass: 4810.48 Da

RESULT: Molecular weight confirmed

SECTION 3 NOTES: *Monoisotopic m/z values are not easily seen in full spectrum view for larger molecules and peptides. The dominant isotopic peak (base peak) shown in the spectrum below can be used to approximate the average molecular weight frequently reported by vendors and databases as a secondary means of confirmation.*



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DATE: 11/17/2025

VERIFICATION QR:

