

Title:

Certificate of Analysis (CoA)

Date: 11/14/2025
Date Tested: 11/14/2025
Customer: Lifeways Research
Testing material: Tirzepatide
Lot Number: TH20-01
BT Sample ID: 005000037060460
Labeled Peptide
Content/Potency: 20 mg
Storage: R.T.
Packing material: Clear glass vial with white label, silver crimp and purple cap
Labeled as: Tirzepatide GLP-1/GIP
Manufacturer: GLP-123
Testing Purpose: FTIR and HPLC analysis for the identification, purity, potency and composition of a peptide product. It does not provide information on particulate matter, microbial contamination or presence of endotoxins.

Test	Method	Specification	Result
General Appearance	USP <630>	White powder	White powder
Mass	USP <41>	As recorded	84.1 mg
FTIR Identification and Composition Analysis	USP <197A>	Sample spectrum should confirm the content of peptide via characteristic bands	FTIR sample spectrum confirms the presence of peptide with addition of excipient(s)/fillers such as mannitol.
HPLC Purity of Peptide Assay (UV)	USP <621>	Specifications: $\geq 98 \%$	99.8 %
HPLC Potency Assay (UV)	USP <621>	Specifications: 95 – 105% of 20 mg	22.63 mg (113.2 %)

The results of the CoA relate only to the item(s) tested and applied to the sample as received.

Kimberly Quinn, MS
Lab Manager
BTLabs

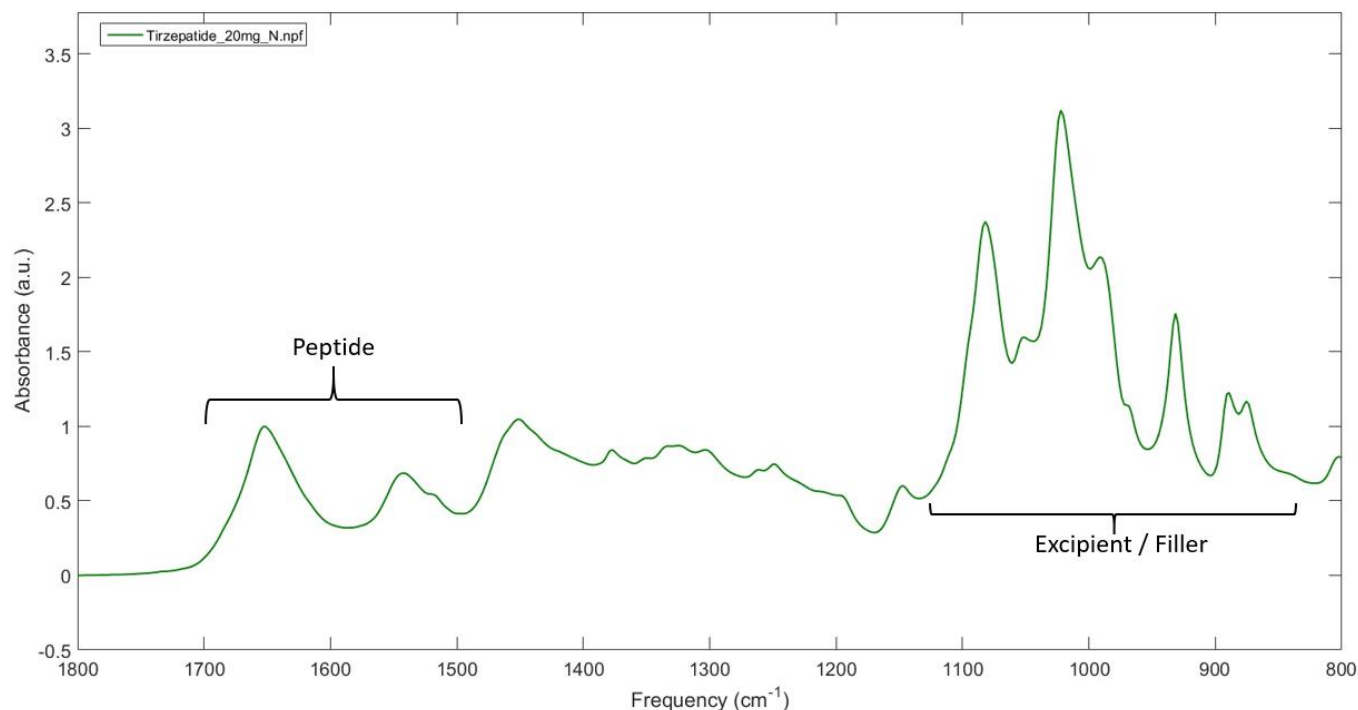
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Scientist-I
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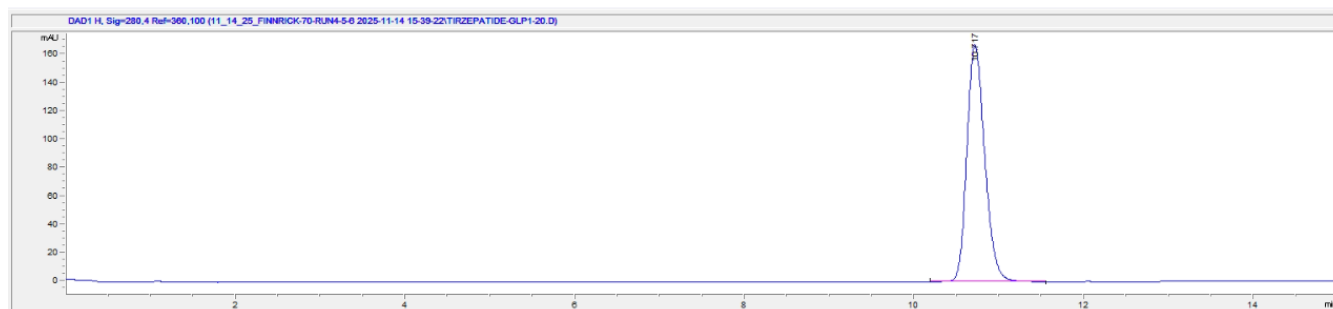
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FTIR ID and Composition Analysis: Tirzepatide 20mg



HPLC Purity and Potency Assay @ 280 nm: Tirzepatide 20mg



Tirzepatide 20mg @ 280 nm		
Peak #:	Retention Time (min)	Area (mAU*s)
1	10.717	2446.6