



COA #:
1550433

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Title:

Certificate of Analysis (CoA)

Date: 5/1/2026
Date Tested: 4/30/2026
Customer: Peptides Optimized LLC
Testing material: GHK-Cu
Lot Number: GK5392
BT Sample ID: 005000039453340
Labeled Peptide
Content/Potency: 100 mg
Storage: R.T.
Visual Description: Small clear vial: purple sample, pink label, silver crimp, dark blue plastic cap.
Labeled as: GHK-Cu
Manufacturer: N/A
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>	purple powder	purple powder
Mass	USP <41>	As recorded	182.8 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 GHK-Cu with addition of excipient(s)/fillers.
HPLC Purity of Peptide Assay	USP <621>	Specifications: $\geq 98\%$	99.7 %
HPLC Potency Assay	USP <621>	Specifications: 90 – 110% of 100 mg	87.6 mg (87.6 %)
Peptide-to-Excipients Ratio	USP <1151>	Recommended ratios of (1:2) to (1:10) for (peptide: excipients)	87.6 : 95.2 mg (1:1.1)

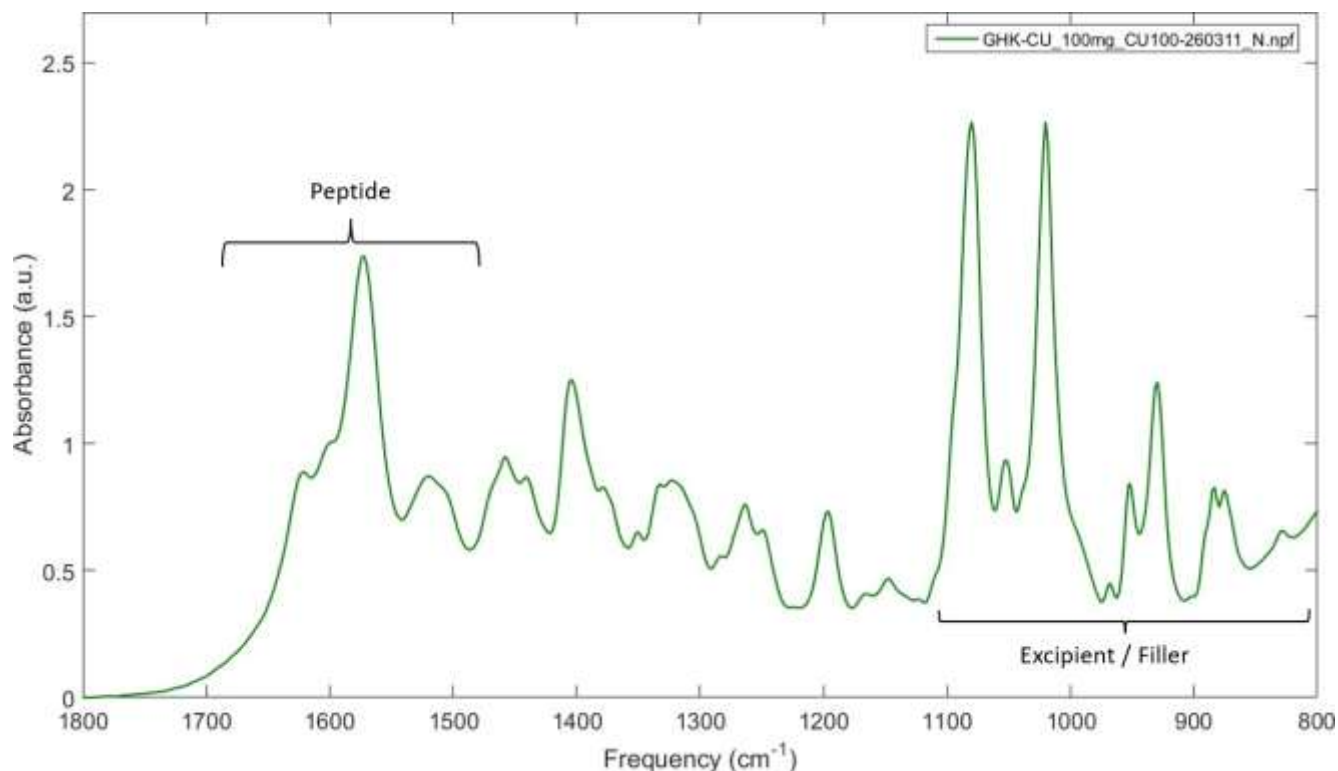
The results of the CoA relate only to the item(s) tested and applied to the sample as received.



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FTIR ID and Composition Analysis: GHK-Cu Lot GK5392



HPLC Purity and Potency Assay @ 220 nm: GHK-Cu Lot GK5392



GHK-Cu Lot GK5392 @ 220 nm

Peak #:	Retention Time (min)	Area (mAU*s)
1	1.584	19407.1
2	1.77	829.2



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Test	Method	Specification	Result
Bacterial Endotoxins Test	USP <85>	40 EU/vial reconstituted	PASS

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

Bacterial Endotoxins Test Retatrutide Lot GK5392

Sample ID	Description	Volume (mL)	Endotoxin Limit (EU/vial)	Lysate Sensitivity (λ , EU/mL)	Result
GK5392	GHK-Cu	3	40 EU/vial	0.25	32.8 EU/vial

The sample passed a valid gel clot endotoxin test based on the type, mode of administration and dosage.