



Title:

## Certificate of Analysis (CoA)

**Date:** 4/22/2026  
**Date Tested:** 4/21/2026  
**Customer:** Mainline Research  
**Testing material:** Semax  
**Lot Number:** N/A  
**BT Sample ID:** 005000039742075  
**Labeled Peptide Content/Potency:** 10 mg  
**Storage:** R.T.  
**Visual Description:** small clear vial: white sample, white label, silver crimp, black and red plastic cap.  
**Labeled as:** Semax  
**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.

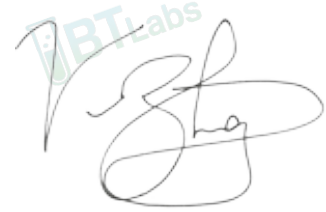


Test	Method	Specification	Result
General Appearance	USP <630>	white powder	white powder
Mass	USP <41>	As recorded	46.7 mg
FTIR Identification and Composition Analysis	USP <197A>	Sample spectrum should confirm the content of peptide via characteristic bands	FTIR sample spectrum confirms the presence of Semax 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 10 mg	9.2 mg (92.5 %)
Peptide-to-Excipients Ratio	USP <1151>	Recommended ratios of (1:2) to (1:10) for (peptide: excipients)	9.2 : 37.5 mg (1:4)

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



Andrea Castro, AS  
Scientist-II  
BTLabs



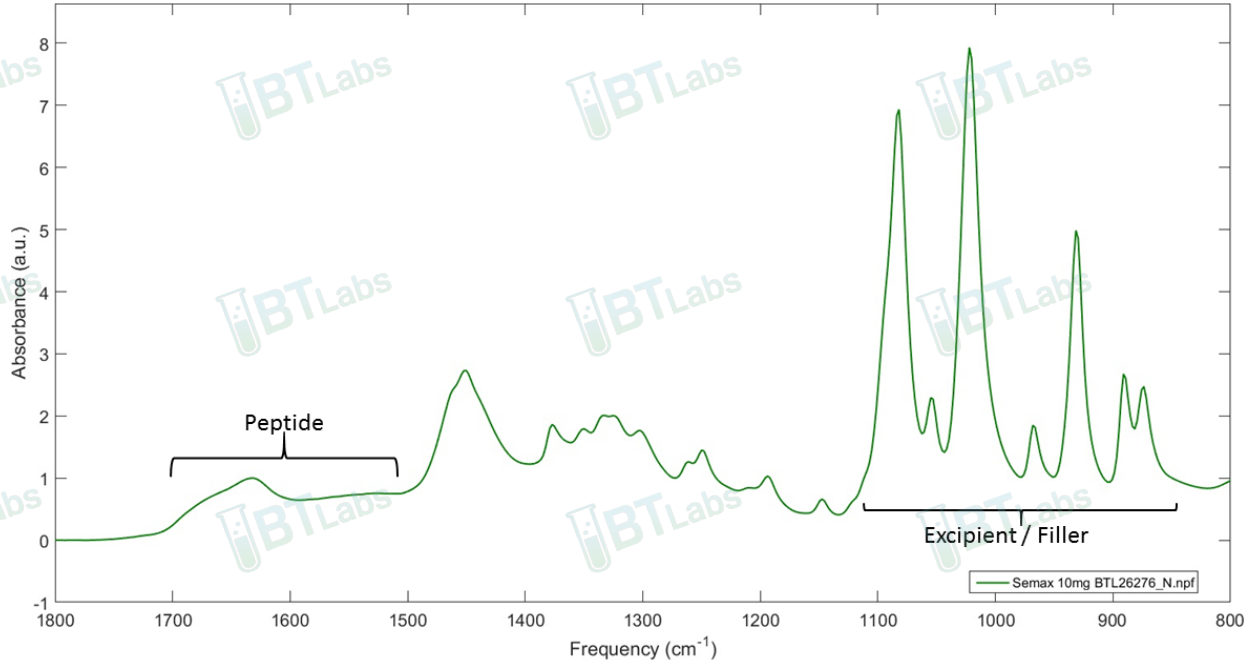
Verna Zheng, AS  
Scientist-II  
BTLabs



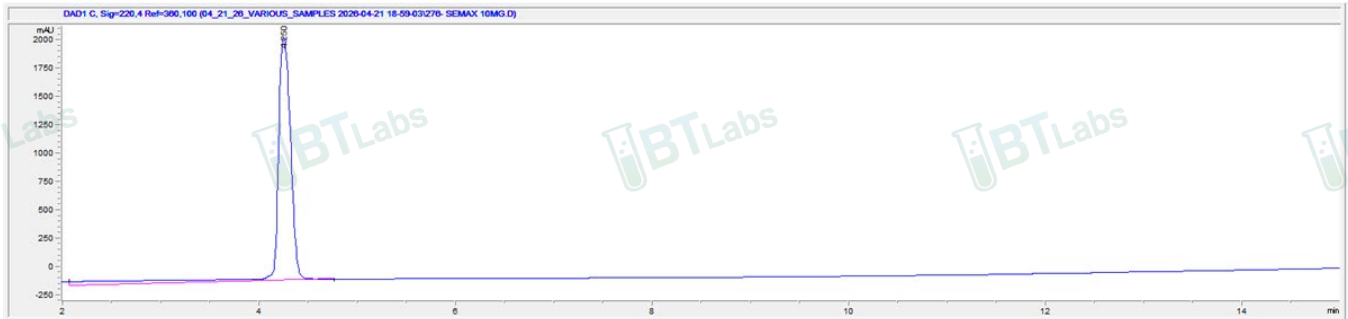
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## Certificate of Analysis (CoA)

### FTIR ID and Composition Analysis: Semax Lot N/A



### HPLC Purity and Potency Assay @ 220 nm: Semax Lot N/A



#### Semax Lot N/A @ 220 nm

Peak #:	Retention Time (min)	Area (mAU*s)
1	4.25	237.3