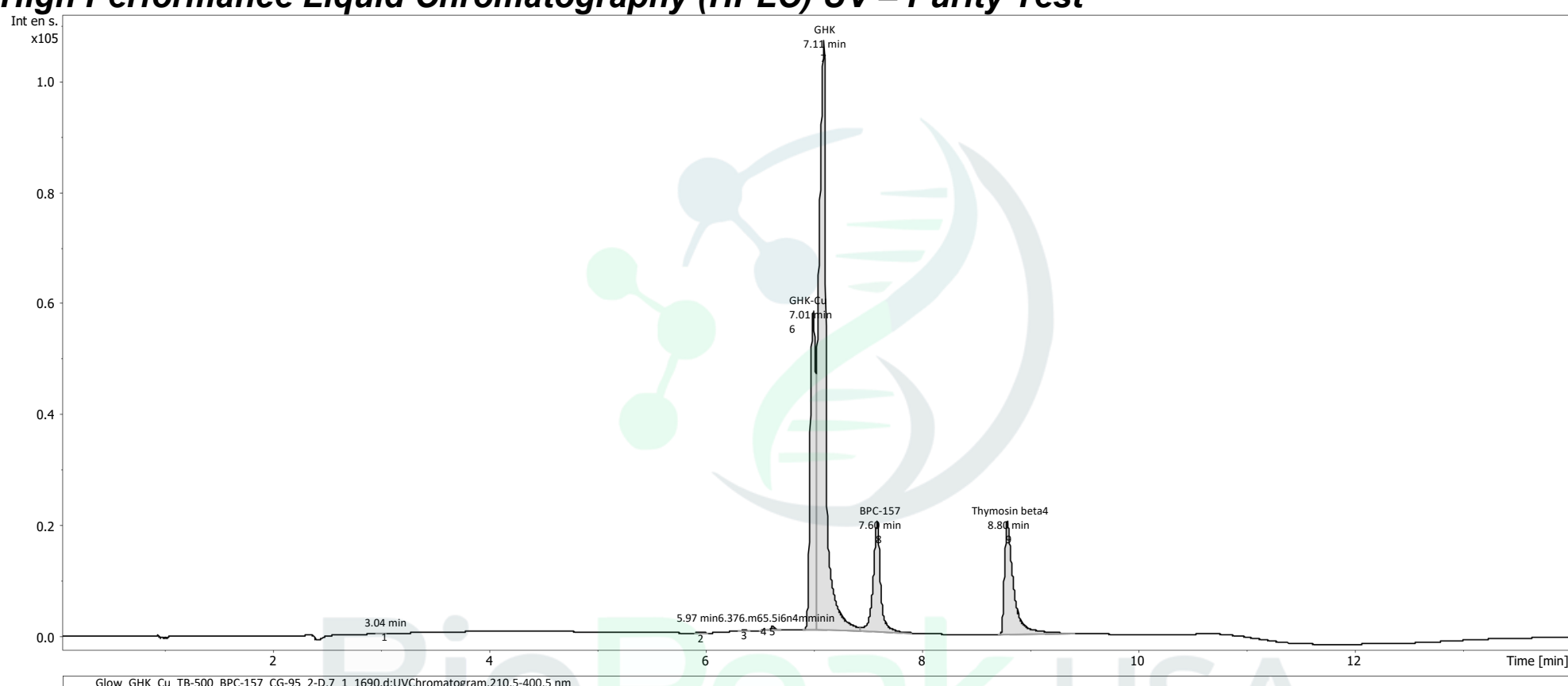


Certificate of Analysis

GHK Copper 25mg, BPC-157 75mg, Thymosin beta4 10 mg

Compound : GHK-Cu, BPC-157, Thymosin beta4 **Client** : Bio Peak USA
Lot number : CG-95 www.biopeakusa.com/
Analysis date : 2025-01-03
Purity % : 99.66%
Method : HPLC-UV-MS

High Performance Liquid Chromatography (HPLC) UV – Purity Test



PEAK LIST			Number of detected peaks: 9	
	Time (min)	Area	%Area	
1	3.04	1.47E+02	0.02	
2	5.97	5.85E+02	0.06	
3	6.37	5.78E+02	0.06	
4	6.55	1.53E+02	0.02	
5	6.64	1.67E+03	0.18	
6	7.01	1.94E+05	20.55	GHK-Cu
7	7.11	5.29E+06	66.04	GHK
8	7.60	9.71E+00	0.28	BPC-157
9	8.80	1.21E+02	0.79	Thymosin beta4

Overall Purity : 99.66

The overall purity is good.
But copper concentration in GHK-Cu complex is low
because GHK peak is bigger than the GHK-Cu complex.

Note: 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.

Analysis Performed by
Ken Pendarvis, ChE
Analytical Chemist
MZ Biolabs
contact@mzbiolabs.com



2025-01-09

GHK Copper 25 mg, BPC-157 5mg, Thymosin beta4 10 mg

Mass Spectrometry (MS) – Identity Test

Identity confirmed using HPLC-MS

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

Note : 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.

GHK-Cu PubChem CID: 71587328

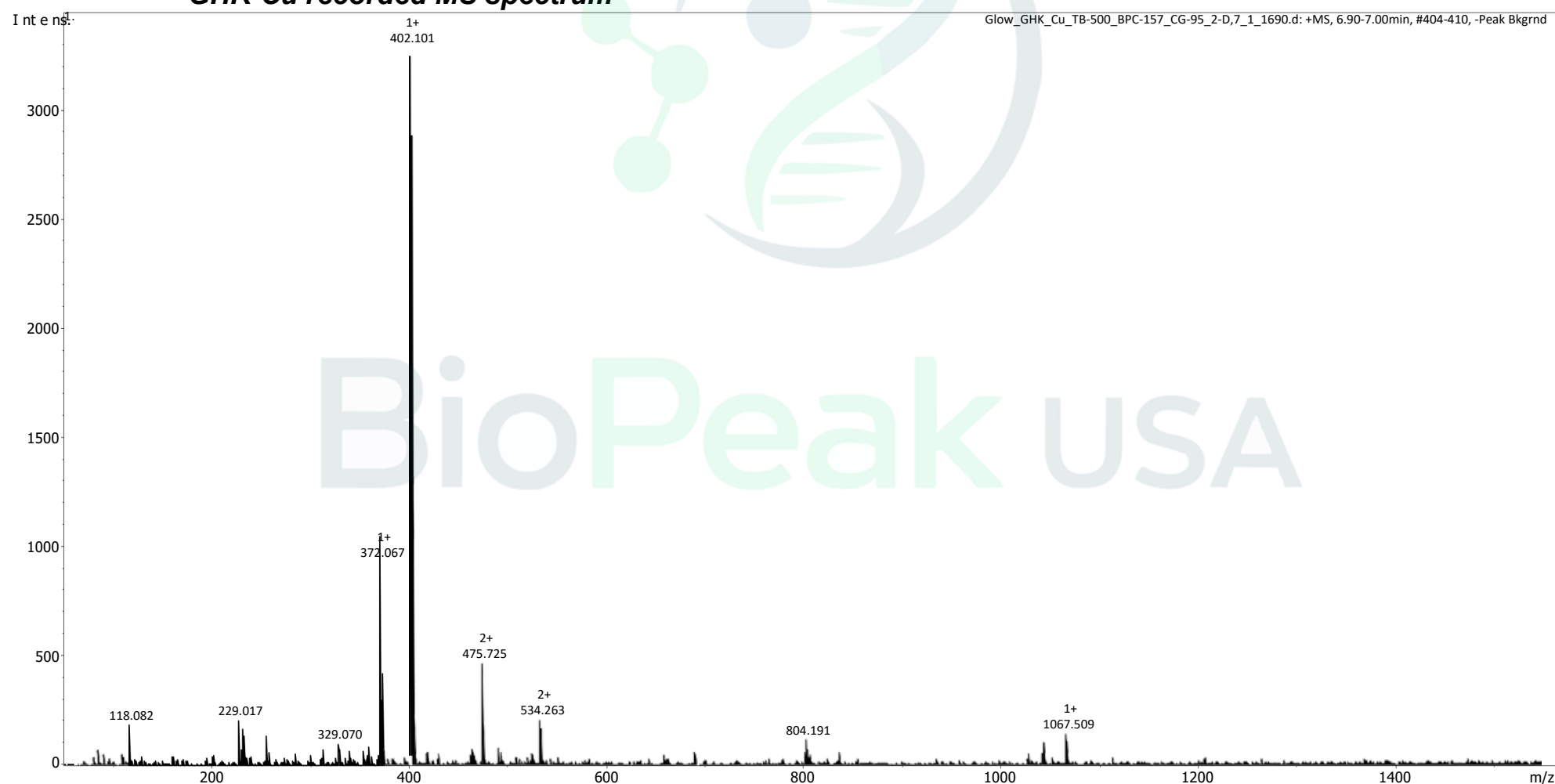
<https://pubchem.ncbi.nlm.nih.gov/compound/71587328>

Expected monoisotopic mass : 402.10 Da

Measured monoisotopic mass : 402.10 Da

Molecularweight confirmed

GHK-Cu recorded MS spectrum



Analysis Performed by
Ken Pendarvis, ChE
Analytical Chemist
MZ Biolabs
contact@mzbiolabs.com



2025-01-09

GHK Copper 25 mg, BPC-157 5mg, Thymosin beta4 10 mg

Mass Spectrometry (MS) – Identity Test

Identity confirmed using HPLC-MS

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

Note : 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.

BPC-157 PubChem CID: 9941957

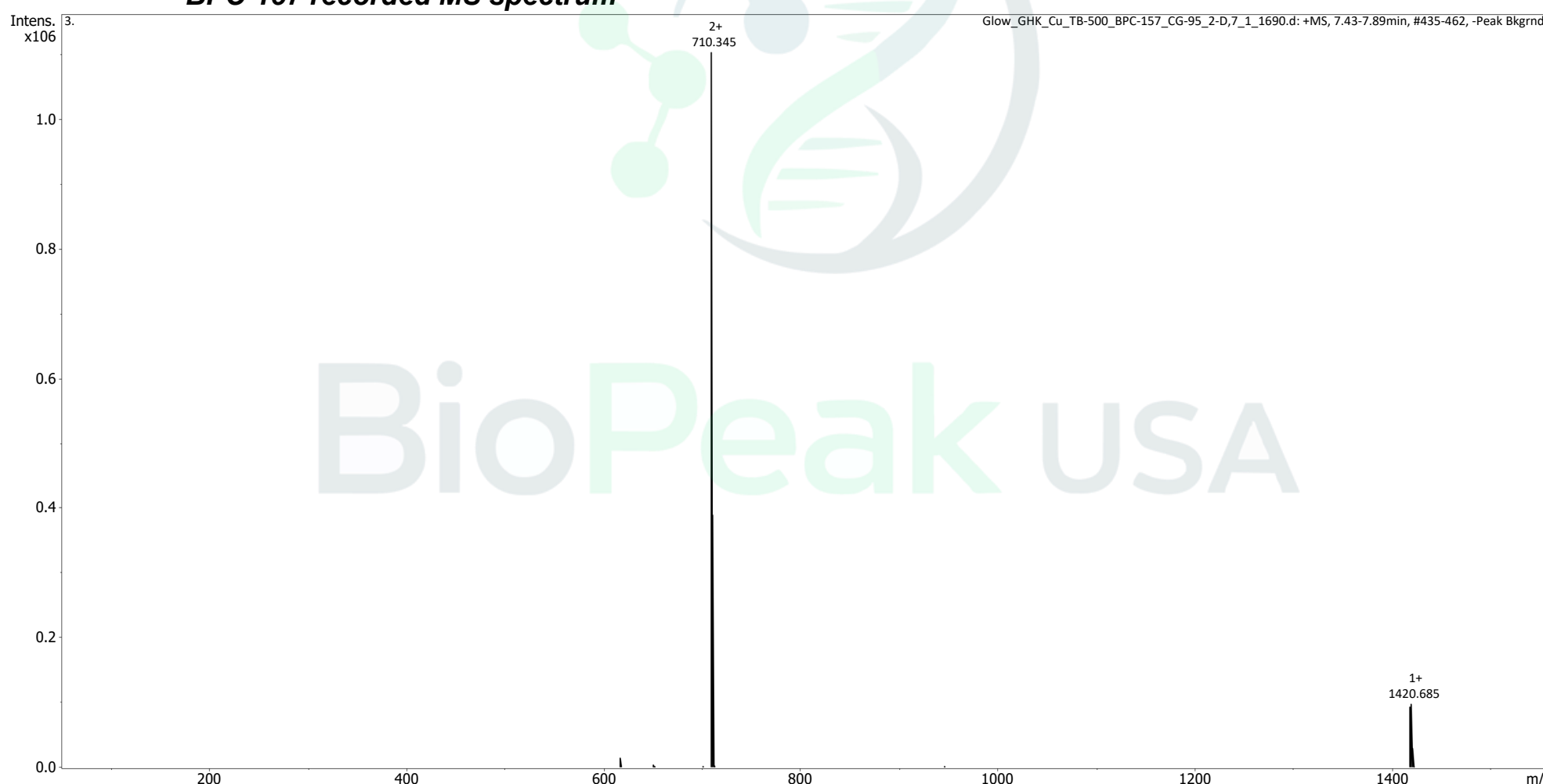
<https://pubchem.ncbi.nlm.nih.gov/compound/9941957>

Expected monoisotopic mass : 1418.70 Da

Measured monoisotopic mass : 1418.69 Da

Molecular weight confirmed

BPC-157 recorded MS spectrum



Analysis Performed by
Ken Pendarvis, ChE
Analytical Chemist
MZ Biolabs
contact@mzbiolabs.com



2025-01-09

GHK Copper 25 mg, BPC-157 5mg, Thymosin beta4 10 mg

Mass Spectrometry (MS) – Identity Test

Identity confirmed using HPLC-MS

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

Note : 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.

Thymosin beta4 PubChem CID: 16132341

<https://pubchem.ncbi.nlm.nih.gov/compound/161323>

Expected monoisotopic mass : 4960.48 Da

Measured monoisotopic mass : 4960.43 Da

Molecular weight confirmed

Thymosin beta4 Recorded MS spectrum



Analysis Performed by
Ken Pendarvis, ChE
Analytical Chemist
MZ Biolabs
contact@mzbiolabs.com



2025-01-09