

Certificate of Analysis

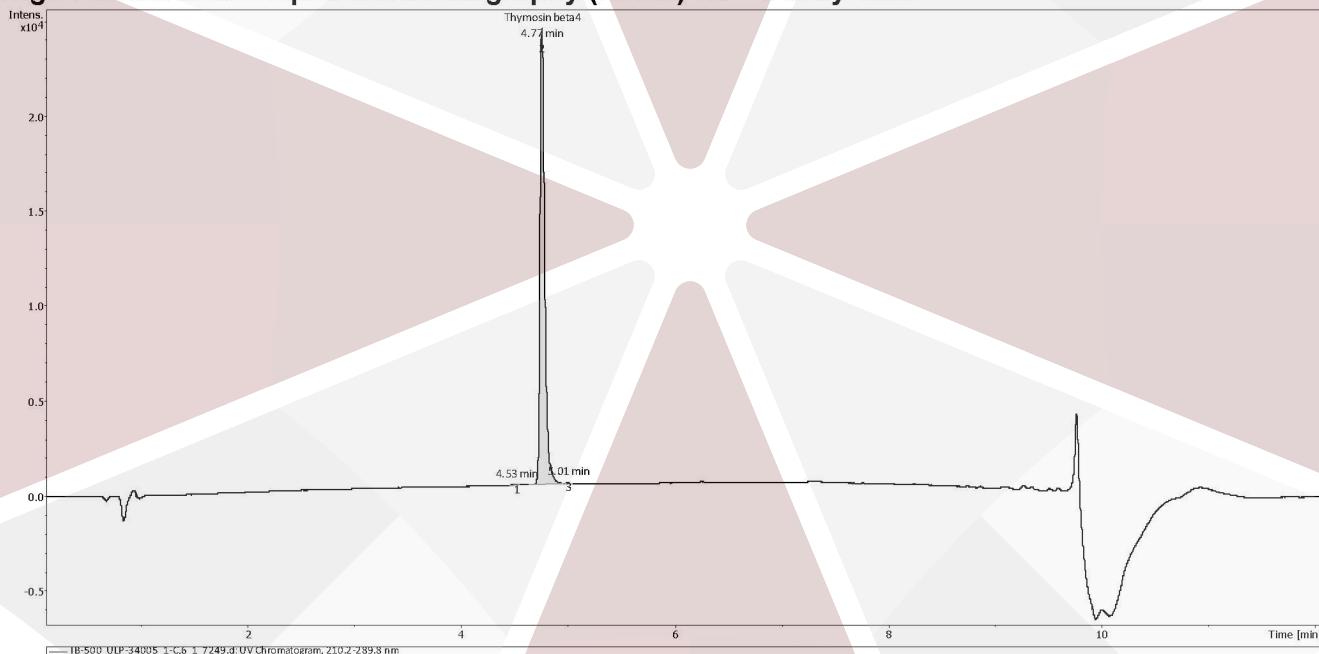
Thymosin beta4

Compound : Thymosin beta4
Lot number : ULP-34005
Analysis date : 2024-11-04
Purity % : 99.80%
Method : HPLC-UV-MS

Client : UMBRELLA.us
3280 E Hemisphere Loop
Tucson, Arizona 85706

PubChem CID: 16132341
<https://pubchem.ncbi.nlm.nih.gov/compound/16132341>

High Performance Liquid Chromatography (HPLC) UV – Purity Test



PEAK LIST		Number of detected peaks: 3	
	Time (min)	Area	%Area
1	4.53	7.89E+01	0.11
2	4.77	7.14E+04	99.80
3	5.01	6.22E+01	0.09

Thymosin beta4

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



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.

2024-11-06

Thymosin beta4

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Mass Spectrometry (MS) – Identity Test

Identity confirmed using HPLC-MS

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

Expected monoisotopic mass : 4960.48 Da

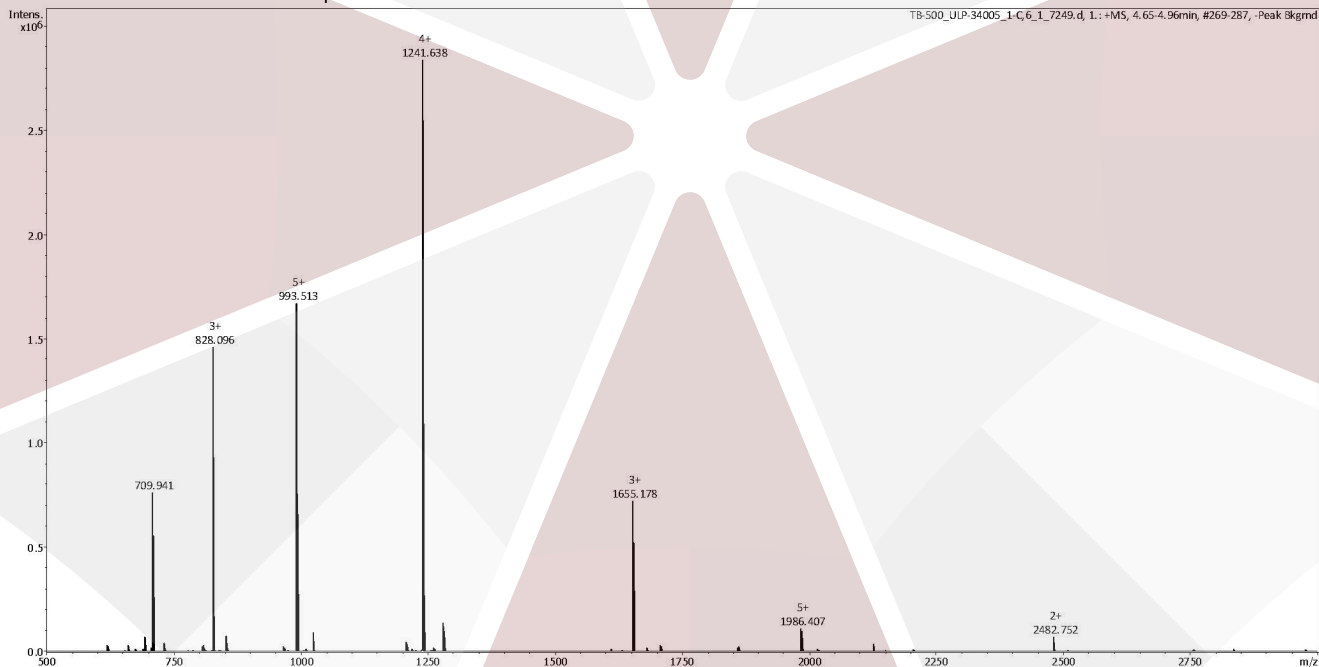
Measured monoisotopic mass : 4960.64 Da

Molecular weight confirmed

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.

Recorded MS spectrum



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2024-11-06