MZ Biolabs
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Endotoxin Gel Clot Assay Report of Analysis

Test Performed: PYROSTAR ES-F LAL Gel Clot Limit Test **Test Date:** 12/04/2025

Product Information

Company Name: Theratide USA **Product Tested:** TB-500 (Thymosin Beta 4) 10mg (1205/83US)

Product Concentration: 10 mg/mL **Vials Received:** 2

Reagent Information

Lysate Product #: WPEK4-20125 **Lysate Lot #:** 062402A **Lysate Exp:** 05/01/2027

Lysate Sensitivity: 0.125EU/mL

Control Standard Endotoxin (CSE) Product #: CSE4037-5006 **CSE Lot #:** G-06USA

CSE Exp: 06/01/2027

LAL Limit Test Results

Solution	Endotoxin Concentration/Added to	Replicates/Results
Sample/Product Solution	None	1: Negative, 2: Negative
Positive Product Control (PPC)	2λ (0.25 EU/mL) in Product	1: Positive, 2: Positive
Positive Control	2λ (0.25 EU/mL) in LRW	1: Positive, 2: Positive
Negative Control	None	1: Negative, 2: Negative

Interpretation: A product result of negative indicates there is not a detectable endotoxin level ≥ 0.125EU/mL. A product result of positive indicates the presence of endotoxins ≥ 0.125EU/mL.

Analyst Signature: _____

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Thymosin beta4 10 mg

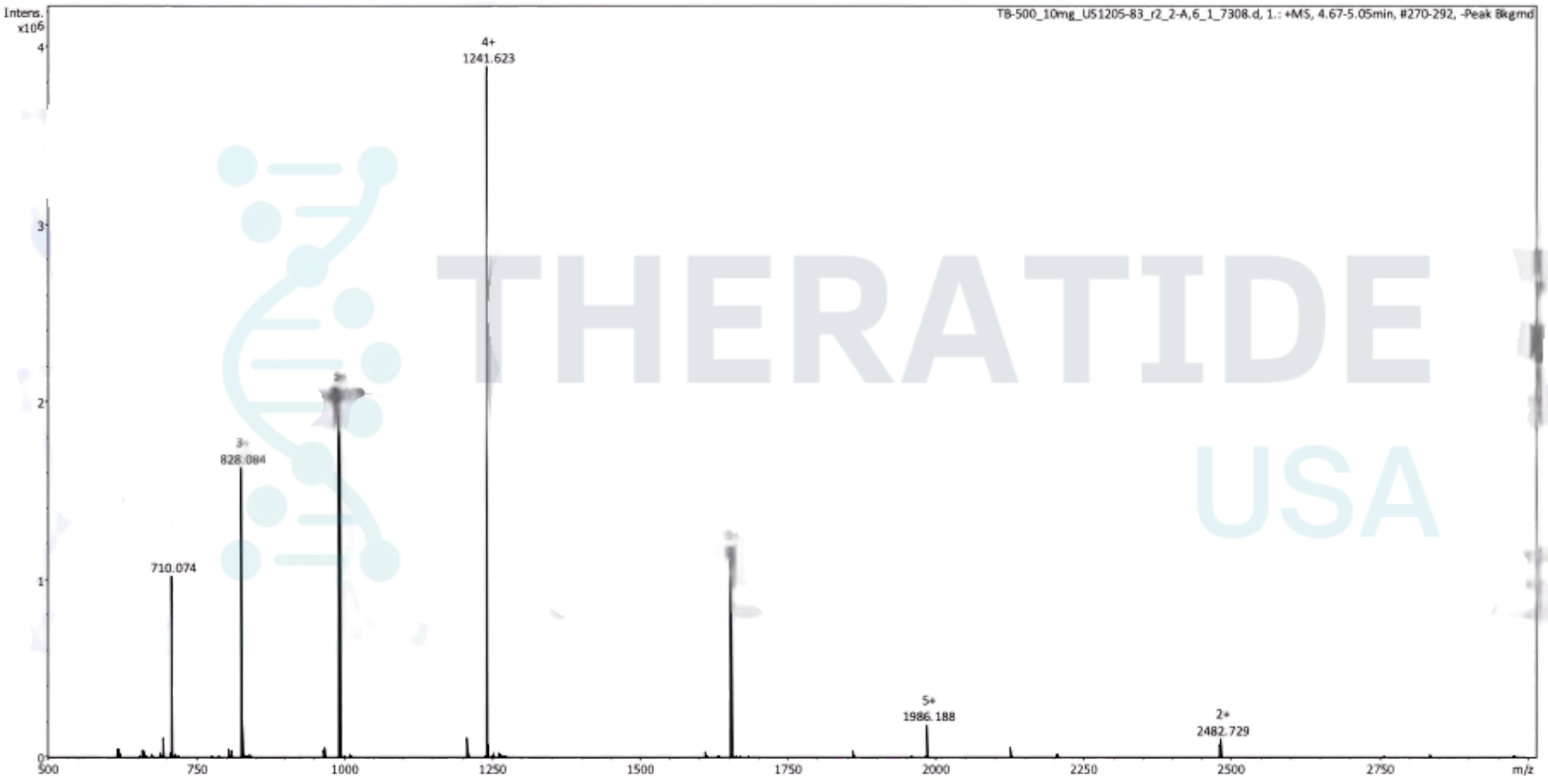
PubChem CID: 16132341
https://pubchem.ncbi.nlm.nih.gov/compound/16132341

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 : 4960.48 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



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

2024-11-08

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Certificate of Analysis

Thymosin beta4 10 mg

Compound	: **Thymosin beta4**	**Client :**	Theratide USA
Lot number	: **US1205/83 vial 2**		https://www.theratideusa.com
Analysis date	: **2024-11-07**		support@theratideusa.com
Purity %	: **99.52%**		
Method	: **HPLC-UV-MS**		

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: 7

	Time (min)	Area	%Area	
1	2.78	8.65E+01	0.06	
2	4.51	1.23E+02	0.09	
3	4.61	8.27E+01	0.06	
4	**4.77**	**1.33E+05**	**99.52**	**Thymosin beta4**
5	5.08	1.83E+02	0.14	
6	5.21	4.47E+01	0.03	
7	6.79	1.26E+02	0.09	

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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.