



MZ Biolabs
2102 N Country Club Rd
Tucson, AZ 85716
contact@mzbiolabs.com
www.mzbiolabs.com

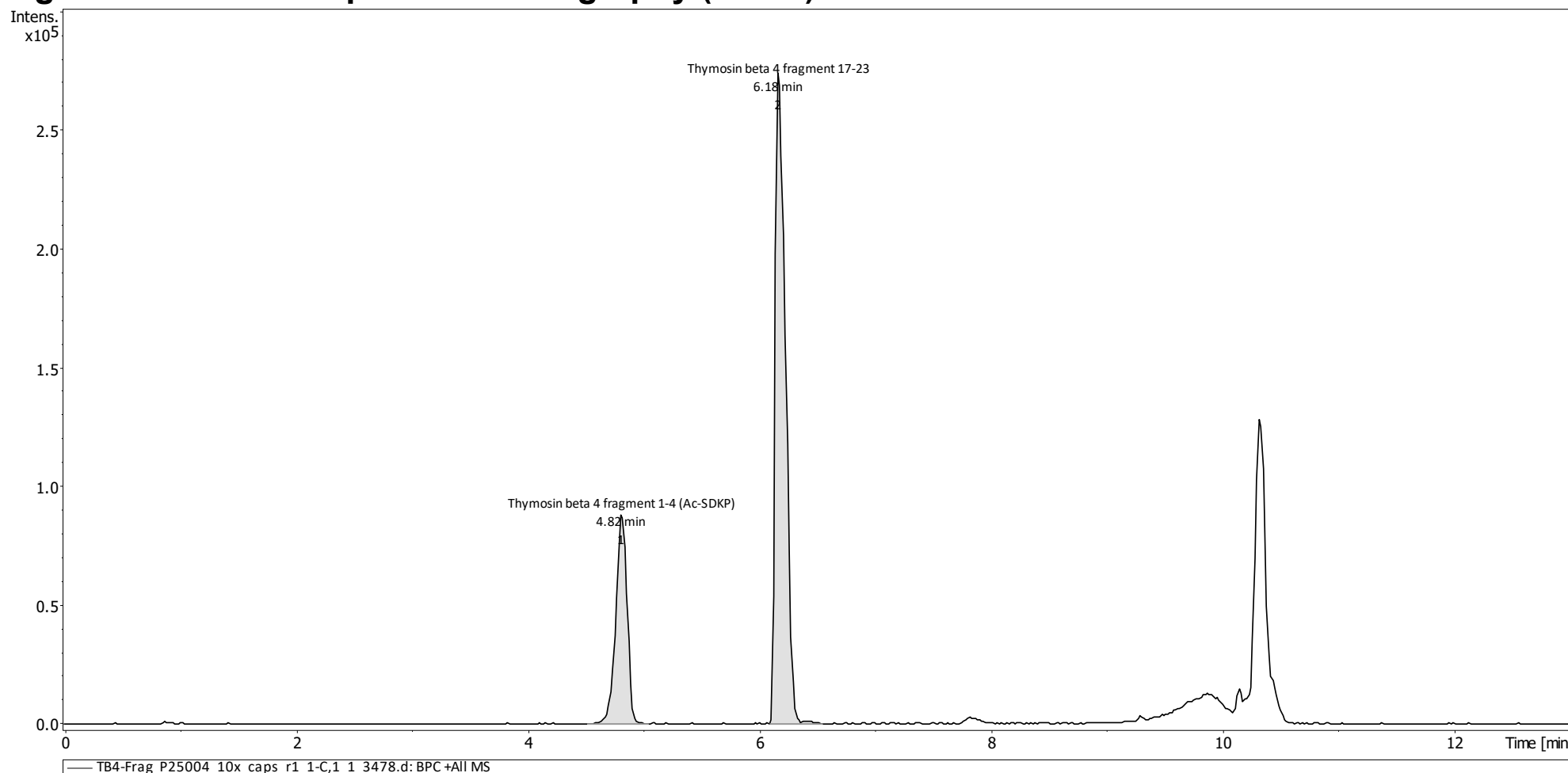
Certificate of Analysis

TB4 fragment 1-4, Thymosin β 4 Fragment 17-23 capsules

Compound : Ac-SDKP,TB-500
Lot number : P25004
Analysis date : 2025-02-26
Ac-SDKP : 511.8 mcg/capsule
TB-500 : 635.9 mcg/capsule
Method : HPLC-MS

Client : BioThive Peptide
www.biothrive.us

High Performance Liquid Chromatography (HPLC) MS



Ac-SDKP detected at 4.82 minutes
TB-500 detected at 6.18 minutes

Background peaks due to capsule filler

Quantification by HPLC-MS

Replicates

TB4-Frag_P25004_caps_r1

TB4-Frag_P25004_caps_r2

TB4-Frag_P25004_caps_r3

Average mcg/capsule

Ac-SDKP
mcg/capsule

537.7

538.9

458.9

511.8

TB-500

mcg/capsule

628.43

601.93

677.35

635.9

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

2025-03-07

TB4 fragment 1-4, Thymosin β 4 Fragment 17-23 capsules

TB4 fragment 1-4 PubChem CID: 65938
<https://pubchem.ncbi.nlm.nih.gov/compound/65938>

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.

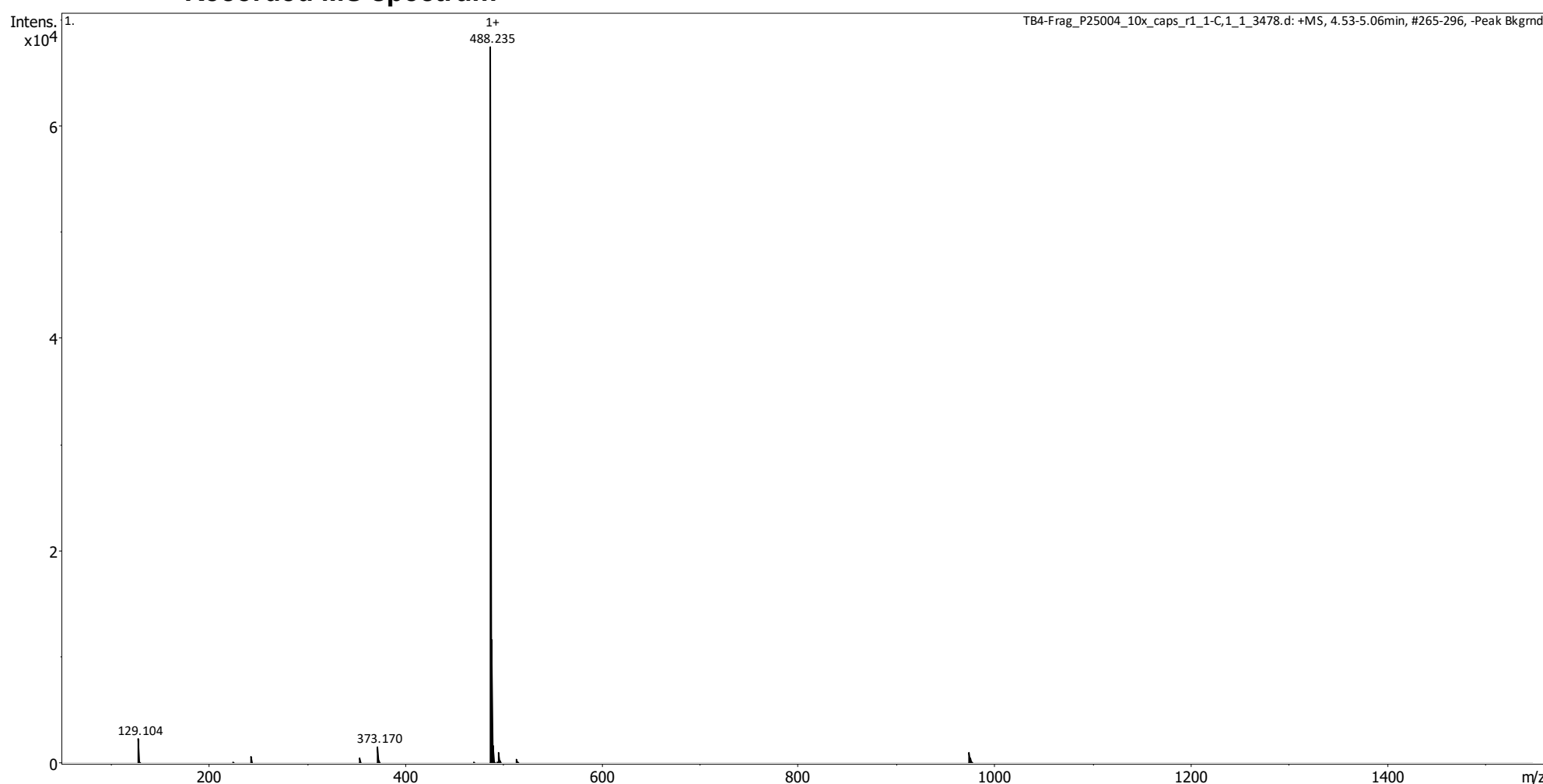
Thymosin beta4 fragment 1-4 (Ac-SDKP)

Expected monoisotopic mass : 487.23 Da

Measured monoisotopic mass : 487.24 Da

Molecular weight confirmed

Recorded MS spectrum



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



2025-03-07

TB4 fragment 1-4, Thymosin β 4 Fragment 17-23 capsules

Thymosin β 4 Fragment 17-23 PubChem CID: 62707662
<https://pubchem.ncbi.nlm.nih.gov/compound/62707662>

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.

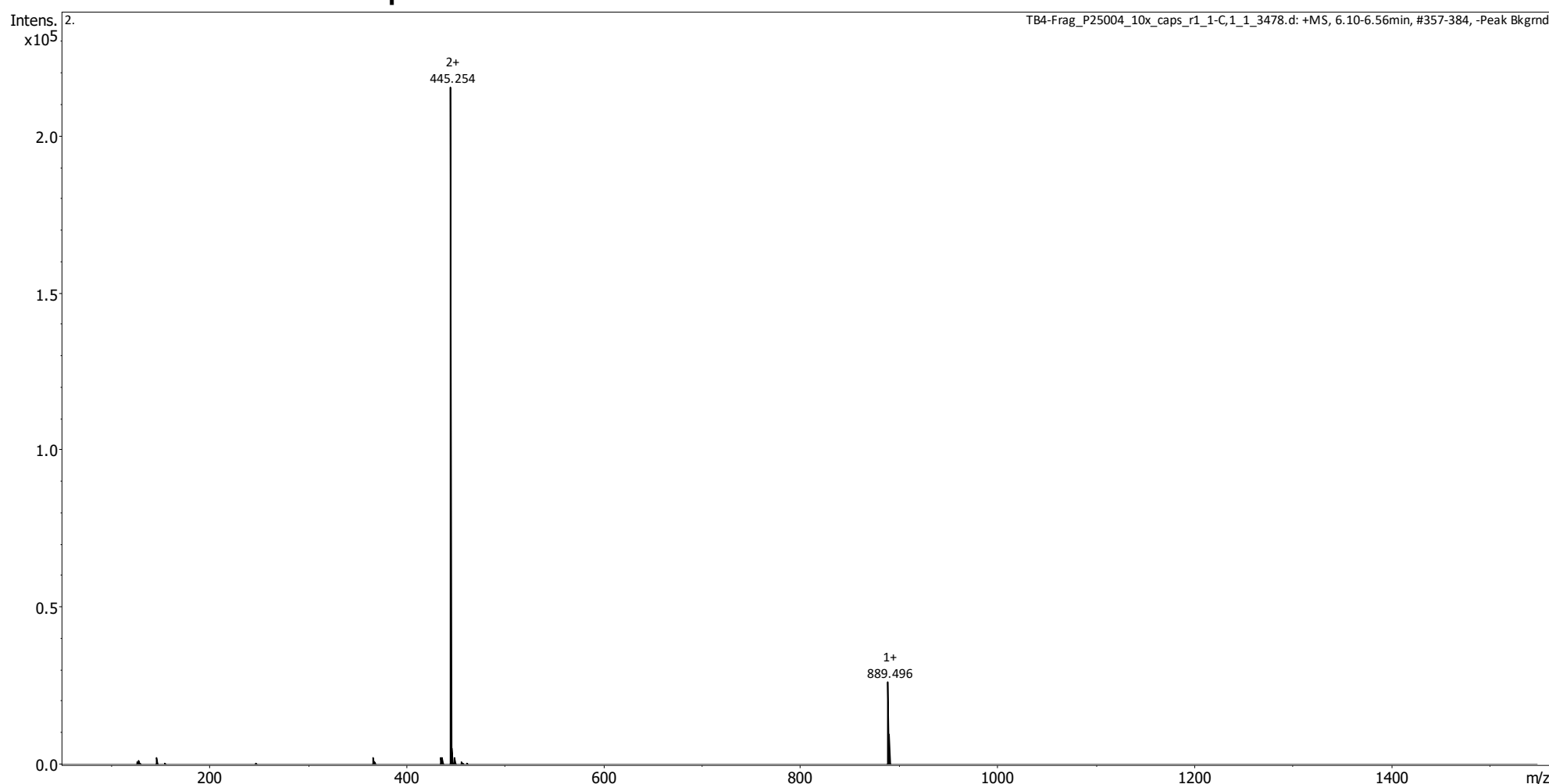
TB-500 (Thymosin beta 4 fragment 17-23)

Expected monoisotopic mass : 888.49 Da

Measured monoisotopic mass : 888.50 Da

Molecular weight confirmed

Recorded MS spectrum



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



2025-03-07