



AMINO PEPTIDES

Important Notice: TB-500 (Thymosin Beta-4 fragment) Batch LOT-2026-JTB500

We believe in complete transparency regarding our independent third-party testing. When viewing the PeptideVerify certificate for our current TB-500 batch (LOT-2026-JTB500), you will see a specific laboratory quality control note regarding its mass. Here is a quick scientific explanation of those results:

- **Exceptional Purity:** The HPLC analysis confirms this batch is highly pure, with a verified purity of 99%.
- **The Automated Lab Note:** The testing laboratory software expected a molecular weight of 889.0 Da. However, the detected weight was fractionally lighter at 888.4 Da. Because this microscopic difference resulted in a -675 ppm error, it exceeded the software's automated tolerance threshold and triggered a review note.
- **Why it is Confirmed:** A difference of just 0.6 Daltons is incredibly small. In mass spectrometry, this fractional variance is completely normal and is typically caused by minor expected structural stabilisations or standard instrument calibration limits. Because this result perfectly matches the expected chemical signature in a real-world analytical setting, the human chemist manually approved the test, officially marking the Mass Spectrometry (MS) Verification as "✓ Confirmed".

This slight mathematical variance simply reflects normal laboratory testing tolerances. You can proceed with your research knowing the batch's identity is fully verified and its purity is exceptional.

The Hidden Dangers of Unverified Peptides The research compound industry is unfortunately flooded with fabricated test results, in-house documents with obvious bias, and generic "specification sheets" disguised as actual batch tests.

Using unverified or cheaply manufactured peptides does not just ruin expensive experiments—it introduces severe safety risks to your laboratory environment. Unregulated synthesis often leaves behind dangerous residues, including toxic chemical solvents, heavy metals, and unknown biological byproducts. Introducing these hazardous, unknown variables into any sensitive biological assay or research subject can yield disastrous and unpredictable consequences.

At Amino Peptides Ltd, we believe researchers deserve absolute safety and certainty. A compromised peptide is never worth the risk.

Protect Your Research: Red Flags and Green Flags We have created a comprehensive guide on how to verify laboratory data, teaching you exactly how to spot fake C.O.A.s and identify the critical "Red and Green Flags" before purchasing from *any* supplier.

Learn how to verify your data and stay safe here: <https://aminopeptides.co.uk/coas/>

Link to original independent test <https://www.peptideverify.co.uk/verify/PV-F21A6E-SZKC-7B>



PeptideVerify | Certificate of Analysis

INDEPENDENT THIRD-PARTY PEPTIDE VERIFICATION

PREMIUM

Report PV-F21A6E-SZKC-7B

CERTIFICATE ID PV-F21A6E-SZKC-7B	ISSUE DATE 05/03/2026	BATCH/LOT LOT-2026-JTB500	CUSTOMER Amino Peptides Ltd
SAMPLE DESCRIPTION TB-500 (Thymosin Beta-4 fragment)	EXPECTED MW 889.0 Da	ANALYSIS DATE 05/03/2026 10:36	INSTRUMENT LCMS Line 1

VERIFICATION SUMMARY

Purity (HPLC)

99%

Area% × PPI

Mass Match

Expected MW: **889.0 Da**
Detected MW: **888.4 Da ✓**

MW calculated from m/z 889.45 [M+1H]⁺

ANALYTICAL RESULTS

VERIFIED PURITY

99%

HPLC Analysis - 2 Peaks

PEAK PURITY (PPI)

99%

Spectral homogeneity of main peak

MAIN PEAK AREA

99%

Main peak vs total integrated area

MAIN PEAK

#2 @ 5.781 min

TOTAL PEAKS

2

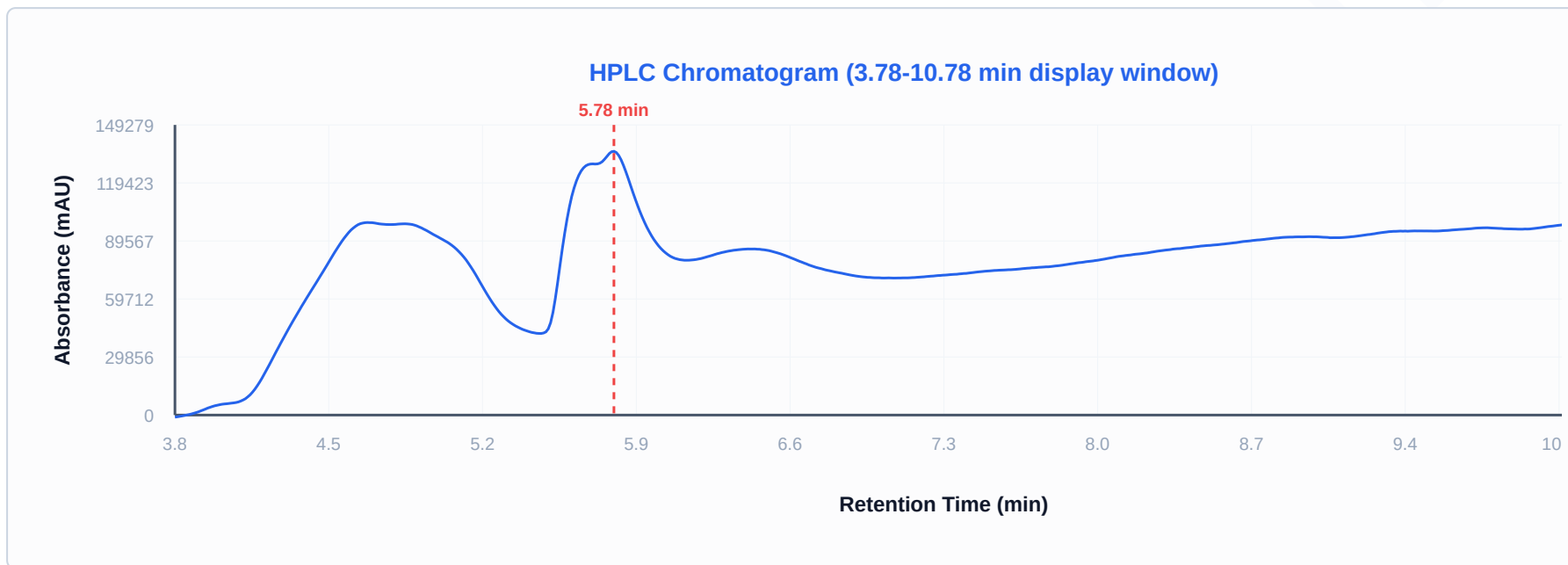
MS VERIFICATION

✓ Confirmed

DETECTION

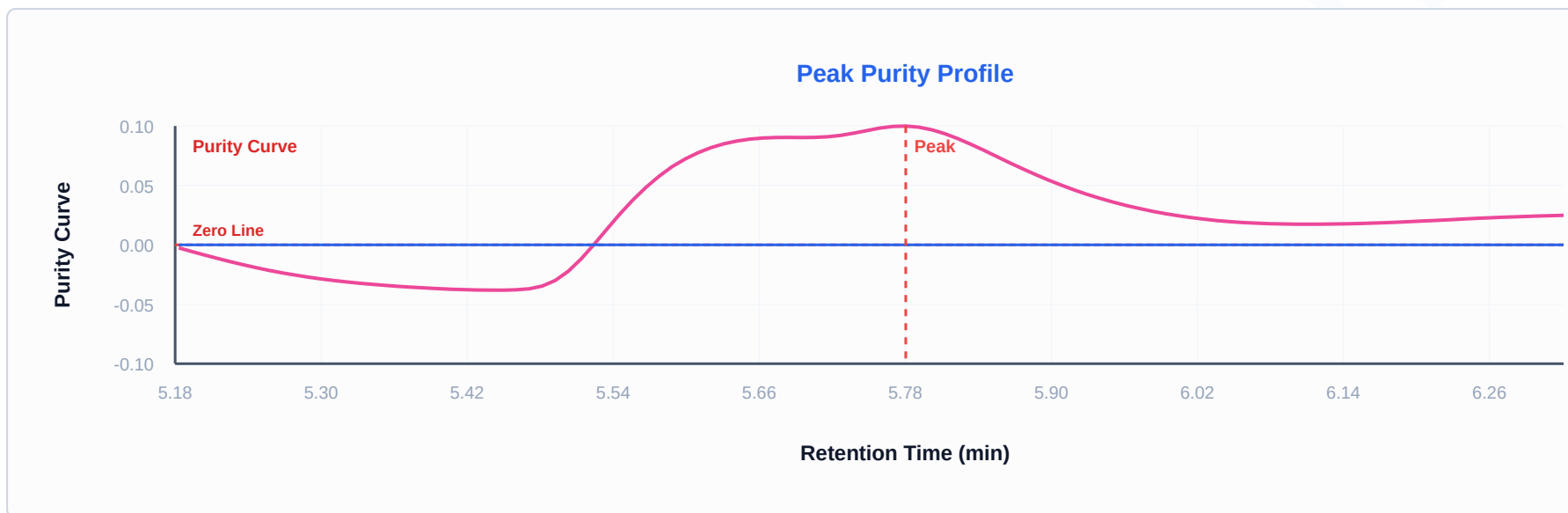
215 nm (± 4)

HPLC CHROMATOGRAM



Detection: 215 nm (± 4 nm)

PEAK PURITY PROFILE




PEAK INTEGRATION DATA

PEAK #	RETENTION (MIN)	AREA	HEIGHT	AREA %	WIDTH (MIN)	RESOLUTION (RS)	TAILING	PLATES (N)
1	2.528	2,660,295	N/A	48.05%	—	—	1.98	1,286
2	5.781	2,876,624	N/A	99.00%	—	7.66	2.26	1,661

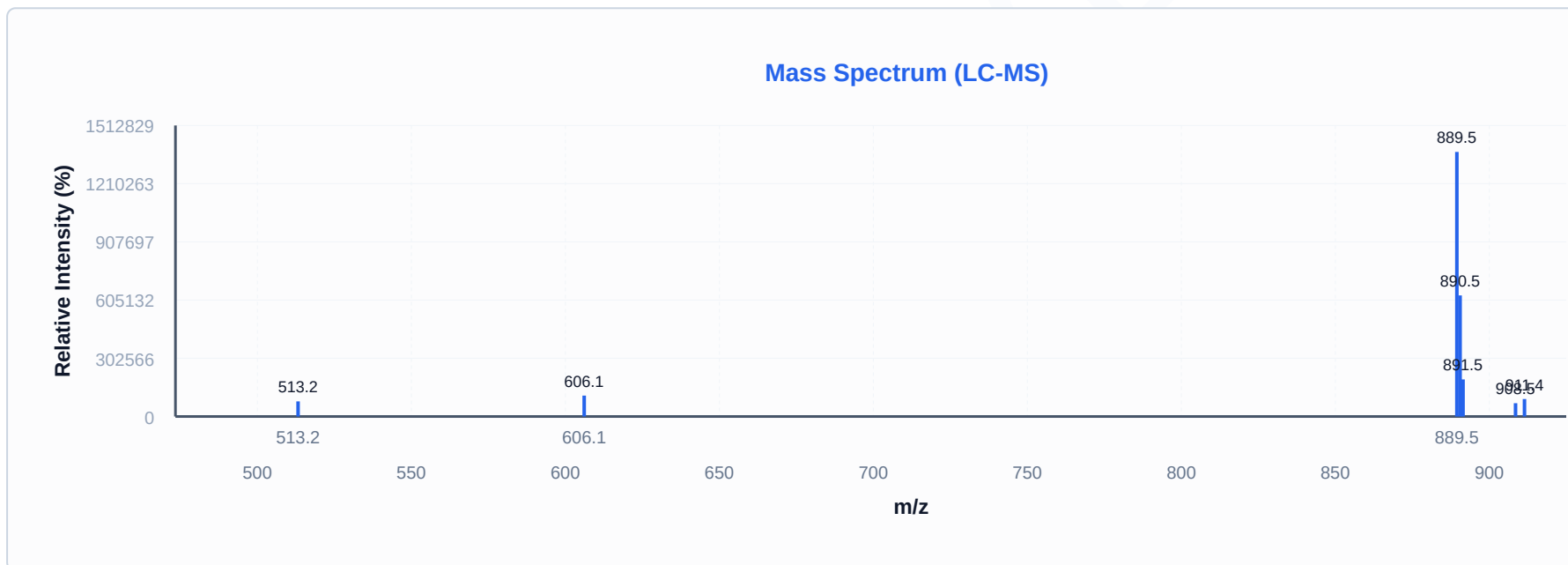
Resolution color-coded: Green ($R_s \geq 2.0$ or N/A for single peak), Yellow ($R_s \geq 1.0$), Red ($R_s < 1.0$). Values calculated from instrument data or derived from peak widths (USP <621>).

MASS SPECTROMETRY ANALYSIS (ESI+)

EXPECTED MW 889.0 Da	DETECTED MW 888.4 Da	MASS MATCH 	BASE PEAK m/z 889.45
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Predicted charge states:

- z=2+ → m/z 445.51
- z=3+ → m/z 297.34
- z=4+ → m/z 223.26
- z=5+ → m/z 178.81
- z=6+ → m/z 149.17



DETECTED M/Z	ASSIGNMENT	INTENSITY	RELATIVE %
889.45	—	1,375,299	100.0%
890.50	[M+H] ⁺	629,324	45.8%
891.45	—	192,786	14.0%
606.10	—	108,685	7.9%

DETECTED M/Z	ASSIGNMENT	INTENSITY	RELATIVE %
911.40	—	90,839	6.6%
513.20	—	78,562	5.7%
908.50	—	69,142	5.0%

QUALITY CONTROL NOTES

Mass error -675 ppm exceeds typical tolerance. Review recommended.

METHOD INFORMATION

Instrument	LCMS Line 1
Software	LabSolutions 5.97
Analyst	System Administrator
Method	HPLC-MS
Detection	215 nm (± 4 nm)
MS Ionization	Electrospray (ESI+)

ANALYST NOTES

Lab Observations: Form: Lyophilized powder Color: White Condition: As expected - no issues

Purity Calculation Method: Purity is calculated in accordance with laboratory practice. Where a single chromatographic peak is present, purity is derived from the Peak Purity Index (PPI) — a measure of spectral homogeneity. Where multiple peaks are detected, purity is calculated as the chromatographic area percentage of the main peak multiplied by its Peak Purity Index (Area% ×

PPI).



 **CERTIFICATE VERIFICATION**

INDEPENDENTLY VERIFIED

peptideverify.co.uk/verify/PV-F21A6E-SZKC-7B

Scan QR code or visit the URL above to verify this certificate's authenticity and view detailed analysis data.

IMPORTANT NOTE

Sample Composition reflects UV-detectable compounds only. Non-UV excipients (mannitol, sugars, salts) are not measured by this method.

PeptideVerify — Independent Third-Party Peptide Verification

Analysis performed under controlled laboratory conditions by GLP-compliant analytical facilities.

Certificate ID: PV-F21A6E-SZKC-7B | Batch/Lot: LOT-2026-JTB500 | Customer: Amino Peptides Ltd | Generated: 05 Mar 2026, 22:10