



Important Notice: MOTS-c Batch LOT-2026-JMTS

We believe in complete transparency regarding our independent third-party testing. When viewing the PeptideVerify certificate for our current MOTS-c batch (LOT-2026-JMTS) , you will see a specific laboratory note regarding its mass. Here is a quick explanation:

- **Exceptional Purity:** The HPLC analysis confirms this batch is highly pure at 99.4% , demonstrating a single, clean peak.
- **The Lab Note:** The testing laboratory expected a molecular weight of 2174.6 Da. However, the detected weight was slightly lighter at 2173.9 Da , triggering a mass error note on the certificate.
- **The Scientific Reason:** Our manufacturer deliberately synthesised this batch as the "Amidated" version of MOTS-c rather than the standard "Free Acid" form. Amidation is a common process used to significantly improve a peptide's stability and shelf-life, and it naturally makes the molecule roughly 1 Dalton lighter.

This slight weight difference simply confirms the peptide's stabilised, amidated structure. You can proceed with your research knowing the batch is exceptionally pure and highly stable.



PeptideVerify | Certificate of Analysis

INDEPENDENT THIRD-PARTY PEPTIDE VERIFICATION

PREMIUM

Report PV-F21A6E-SZKC-30

CERTIFICATE ID PV-F21A6E-SZKC-30	ISSUE DATE 05/03/2026	BATCH/LOT LOT-2026-JMTS	CUSTOMER Amino Peptides Ltd
SAMPLE DESCRIPTION MOTS-c	EXPECTED MW 2174.6 Da	ANALYSIS DATE 05/03/2026 10:22	INSTRUMENT LCMS Line 1

VERIFICATION SUMMARY

Purity (HPLC)

99.4%

Single peak (PPI)

Mass Match

Expected MW:	2174.6 Da
Detected MW:	2173.9 Da
Error:	-317 ppm

MW calculated from m/z 544.5 [M+4H]⁴⁺

ANALYTICAL RESULTS

VERIFIED PURITY

99.4%

HPLC Analysis - Single Peak

MAIN PEAK

#1 @ 9.024 min

TOTAL PEAKS

1

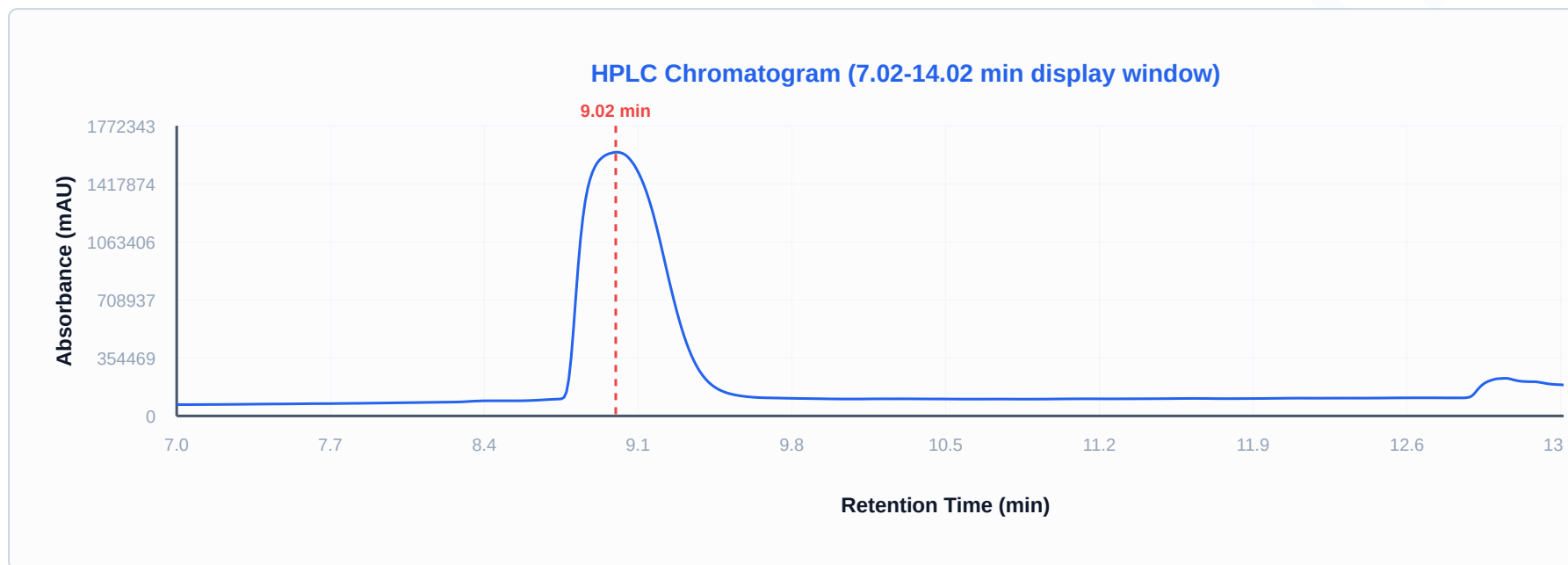
MS VERIFICATION

✓ Confirmed

DETECTION

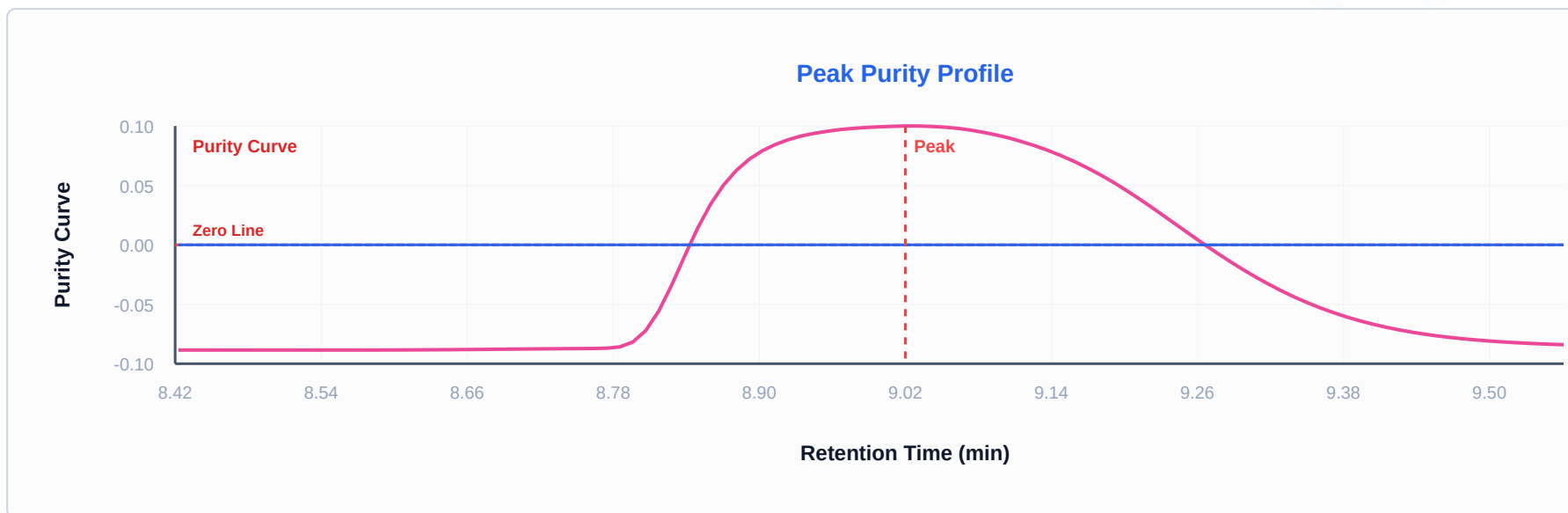
215 nm (± 4)

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	9.024	38,223,420	N/A	100.00%	—	—	1.52	3,678

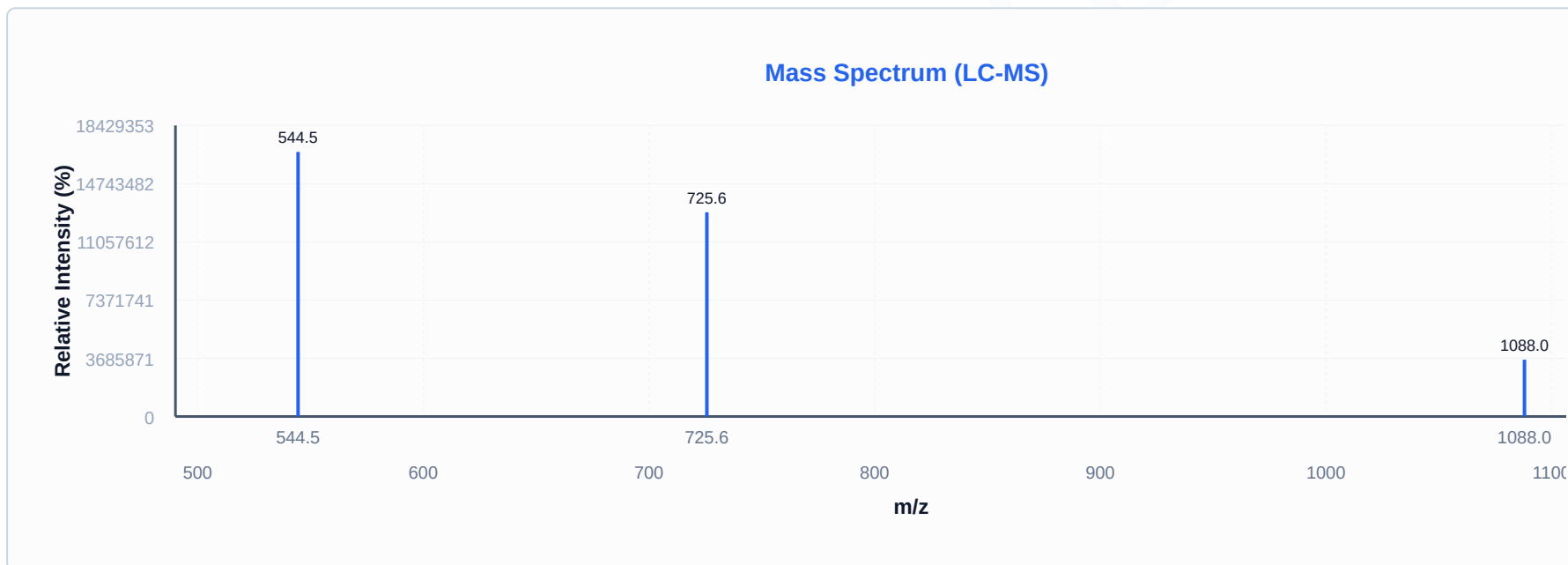
Resolution color-coded: Green ($R_s \geq 2.0$ or N/A for single peak), Yellow ($R_s \geq 1.0$), Red ($R_s < 1.0$). Values calculated from instrument data or derived from peak widths (USP <621>).

MASS SPECTROMETRY ANALYSIS (ESI+)

EXPECTED MW 2174.6 Da	DETECTED MW 2173.9 Da	MASS MATCH -317 ppm	BASE PEAK m/z 544.50
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Predicted charge states:

- z=2+ → m/z 1088.30
- z=3+ → m/z 725.87
- z=4+ → m/z 544.65
- z=5+ → m/z 435.93
- z=6+ → m/z 363.44



DETECTED M/Z	ASSIGNMENT	INTENSITY	RELATIVE %
544.50	[M+4H] ⁴⁺	16,753,957	100.0%
725.65	[M+3H] ³⁺	12,931,576	77.2%
1087.95	[M+2H] ²⁺	3,596,887	21.5%

QUALITY CONTROL NOTES

Mass error -317 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% \times PPI).



✓ **CERTIFICATE VERIFICATION**

INDEPENDENTLY VERIFIED

peptideverify.co.uk/verify/PV-F21A6E-SZKC-30

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-30 | Batch/Lot: LOT-2026-JMTS | Customer: Amino Peptides Ltd | Generated: 05 Mar 2026, 18:23