Analytical Testing Laboratory
7271 Engle Rd Unit 201A, Middleburg Heights, OH 44130
www.sonic-laboratories.com
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Verify at sonic-laboratories.com/coa-lookup **Code: UEYX4M3Z**

CERTIFICATE OF ANALYSIS

COA #: **SD20261109_037_KPV10**

SAMPLE INFORMATION

Client	First Standard Peptides	**Accession #**	SD20261109_037
Compound	KPV	**Date Received**	11/09/2026
Molecular Formula	C16H30N4O4	**Date Reported**	11/11/2026
Appearance	White lyophilized powder	**Labeled Quantity**	10mg
Sample Form	Lyophilized Vial	**Lot / Batch #**	KP10-26-B001
Storage	Room Temp	**CAS Number**	67727-97-3
Cap Color	Orange		



All Chemical Analysis Performed by LC-MS/MS

ANALYTICAL RESULTS

Test / Analysis	Method	Specification	Result	Status
Identity (Mass Confirmation)	LC-MS/MS	Matches reference mass	KPV	**Pass**
Purity	LC-MS/MS	≥ 95.0%	99.552%	**Pass**
Net Peptide Content	HPLC	Report value	10.48mg	**Pass**
Observed Molecular Mass	LC-MS	Within ± 1.0 Da	m/z 344.3 KPV [M+H]+	**Pass**
Theoretical Molecular Mass	Reference	—	342.43 Da	**Pass**
Related Substances / Impurities	LC-MS/MS	Report value	Not Detected	**Pass**
Residual Solvents	LC-MS/MS	Report value	Not Detected	N/A

John Humes, MS. **John Humes, MS.**
Analyzed by · Laboratory Analyst · 11/11/2026

Chetan Soni, PhD. **Chetan Soni, PhD.**
Approved by · Laboratory Director · 11/11/2026

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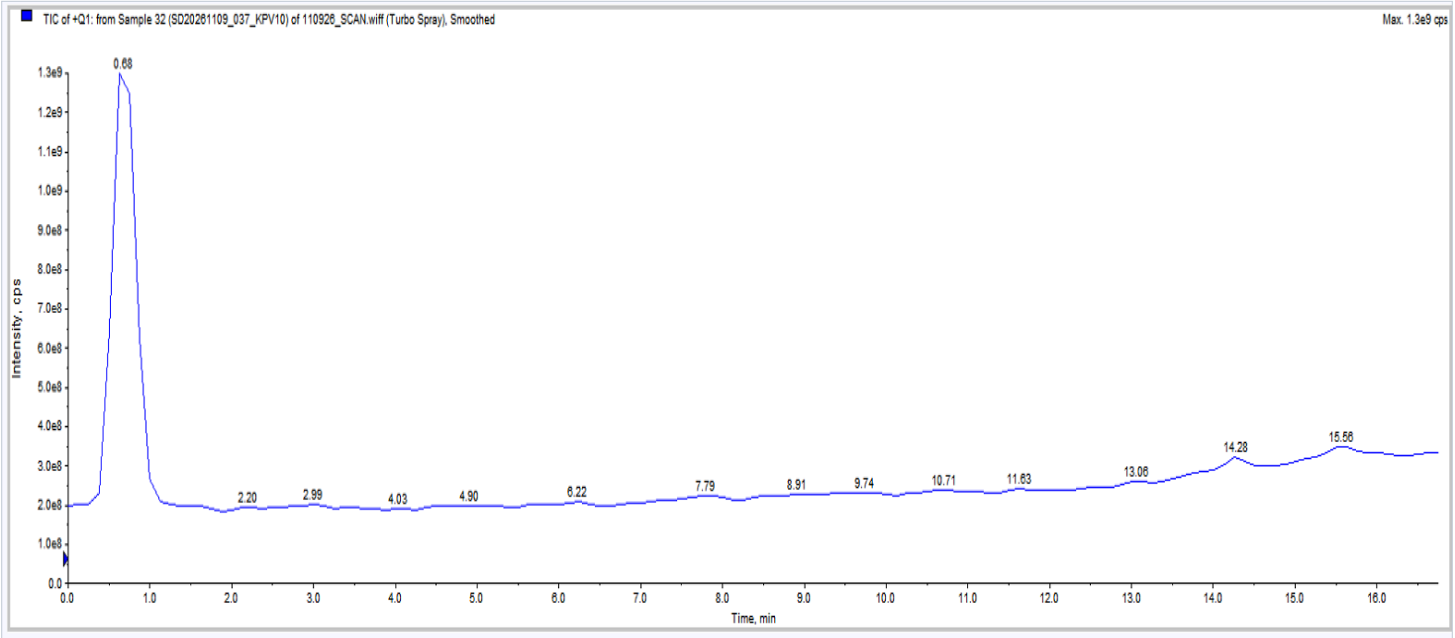
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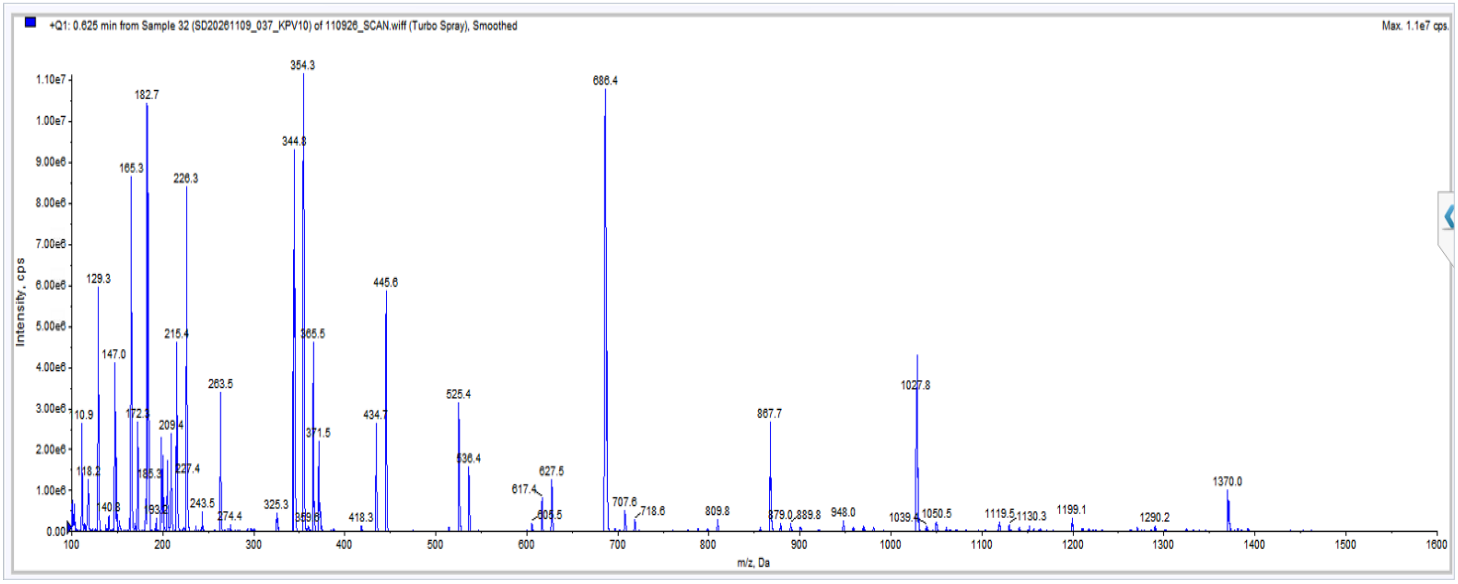
ANALYTICAL DATA

COA #: **SD20261109_037_KPV10**

CHROMATOGRAM



MASS SPECTRUM (LC-MS)



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ANALYTICAL INTERPRETATION

Chromatogram

Retention Time Match for KPV

Mass Spectrum (LC-MS)

Sample ID: SD20261109_037_KPV10
Label Claim: KPV

Observed Ions
m/z 344.3, assigned as KPV [M+H]+
m/z 354.3, minor adduct species
m/z 226.3, fragment ion
m/z 215.4, fragment ion
m/z 182.7, fragment ion
m/z 165.3, fragment ion
Expected Mass

KPV (Lys-Pro-Val)

Neutral Mass ≈ 343.4 Da
[M+H]+ ≈ 344.4
Deconvoluted Mass Calculation

m/z 344.3 ([M+H]+)

344.3−1=343.3 Da344.3 - 1 = 343.3 \text{ Da}344.3−1=343.3 Da
Interpretation

The spectrum contains the characteristic KPV molecular ion:

m/z 344.3, assigned as KPV [M+H]+, deconvoluting to 343.3 Da

Additional observed ions include:

m/z 354.3, minor adduct species
m/z 226.3, fragment ion
m/z 215.4, fragment ion
m/z 182.7, fragment ion
m/z 165.3, fragment ion

The spectrum exhibits:

Strong protonated molecular ion at the expected mass
Characteristic low-mass peptide fragment pattern
Clean identity signal with minimal interference
No evidence of an alternate peptide identity

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Conclusion

The observed molecular ion at m/z 344.3 deconvolutes to 343.3 Da, consistent with the theoretical molecular mass of KPV. The observed mass spectral profile supports the assigned identity.

Result: PASS – Identity Consistent with KPV.

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