

CERTIFICATE OF ANALYSIS

HPLC, Mass Spectrometry & Elemental Impurities Report

Sample Name	Semax
Client Name	Genix Labs
Lot Number	371924
Report Number	ID-SEMAX-10-371924
CAS Number	80714-61-0
Sequence	Met-Glu-His-Phe-Pro-Gly-Pro

Molecular Formula	C ₃₇ H ₅₁ N ₉ O ₁₀ S
Molecular Weight	813.92 g/mol
Amount / Fill	10 mg
Analysis Date	May 19, 2026
Report Date	May 20, 2026
Analytical Method	HPLC-UV-MS (220 nm)

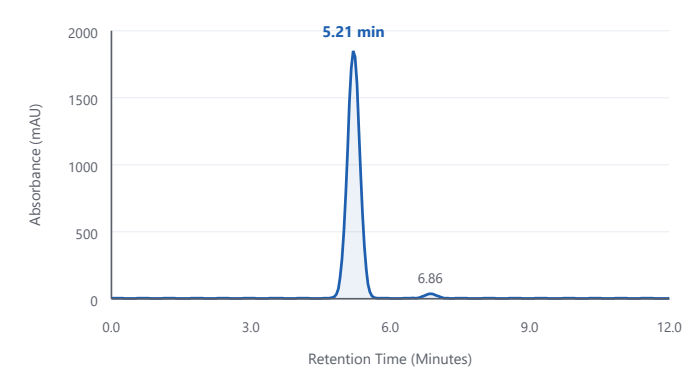
ANALYTICAL RESULTS

Test Parameter	Specifications	Observed Result	Status
Appearance	White to off-white lyophilized solid	Conforms	PASS
Identity (LC-MS)	Observed mass conforms to structure	813.9 amu	PASS
Purity (HPLC-UV)	Minimum 98.00% by chromatogram area	99.45%	PASS
Peptide Content	Report actual content percentage	98.70%	PASS

ELEMENTAL IMPURITIES — USP <232> / <233> (ICP-MS)

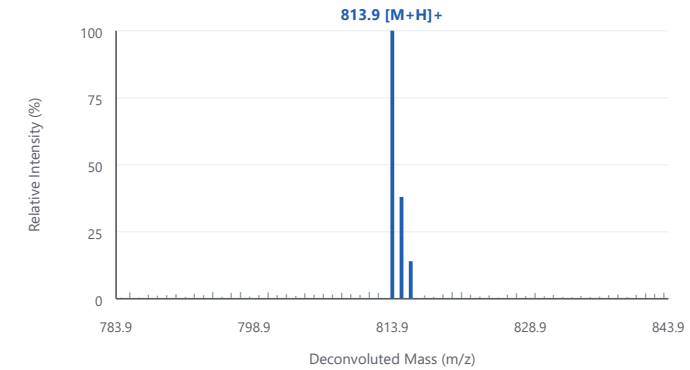
Lead (Pb) < 0.20 ppm PASS · ≤ 10 ppm	Arsenic (As) < 0.05 ppm PASS · ≤ 1.5 ppm	Cadmium (Cd) < 0.05 ppm PASS · ≤ 0.50 ppm	Mercury (Hg) < 0.10 ppm PASS · ≤ 1.5 ppm
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HPLC CHROMATOGRAM (UV @ 220 NM)



Peak #	Retention Time (min)	Peak Area (mAU*s)	Area %
1	5.21	15315.30	99.45%
2	6.86	84.70	0.55%
Total		15400.00	100.00%

MASS SPECTRUM (ESI-MS DECONVOLUTED)



Deconvolution Results:
Expected Mass: 813.92 amu
Observed Mass: 813.87 amu (± 0.5 amu)
Conclusion: Mass matches expected molecular structure.

Report Notes & Disclaimer:

This analysis was performed by High-Performance Liquid Chromatography (HPLC) with Ultraviolet (UV) detection coupled with Electrospray Ionization Mass Spectrometry (ESI-MS). Purity value is calculated by integrating chromatogram peak areas at 220 nm. Peptide content was determined by nitrogen content elemental analysis. Elemental impurities (Pb, As, Cd, Hg) were determined by ICP-MS in accordance with USP <232>/<233> and were below the specified limits. Salts, counter-ions, sugars (excipients), or residual water molecules resulting from lyophilization are not counted as chemical impurities under normal UV chromatographic detection protocols. The results detailed in this Certificate of Analysis relate solely to the specific sample lot number tested as received. For laboratory research use only. Not for human use.

Ken Pendarvis

Ken Pendarvis, ChE
Lead Analytical Chemist, MZ Biolabs
Quality Assurance Sign-Off



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