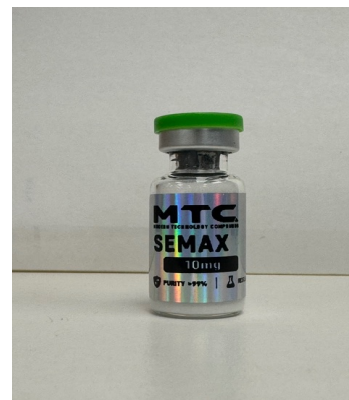


CERTIFICATE OF ANALYSIS

COA #: **SD20260804_008_SEM10**

SAMPLE INFORMATION

Client	MTCompounds	Accession #	SD20260804_008
Compound	Semax	Date Received	08/04/2026
Molecular Formula	C37H51N9O10S	Date Reported	08/05/2026
Counter Ion / Salt	NA	Appearance	White lyophilized powder
Labeled Quantity	10 mg	Sample Form	Lyophilized Vial
Lot / Batch #	N/A	Storage	Room Temp
CAS Number	80714-61-0	Crimp Color	Green



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	Semax	Pass
Purity	LC-MS/MS	≥ 95.0%	99.21%	Pass
Net Peptide Content	LC-MS/MS	Report value	10.43 mg	Pass
Observed Molecular Mass	LC-MS	Within ± 1.0 Da	814.4 [M+H]	Pass
Theoretical Molecular Mass	Reference	—	813.92 Da	Pass
Related Substances / Impurities	LC-MS/MS	Report value	Not Detected	Pass
Residual Solvents	LC-MS/MS	Report value	Not Detected	Pass

John Humes, MS. **John Humes, MS.**
Analyzed by · Laboratory Analyst · 08/05/2026

Chetan Soni, PhD. **Chetan Soni, PhD.**
Approved by · Laboratory Director · 08/05/2026

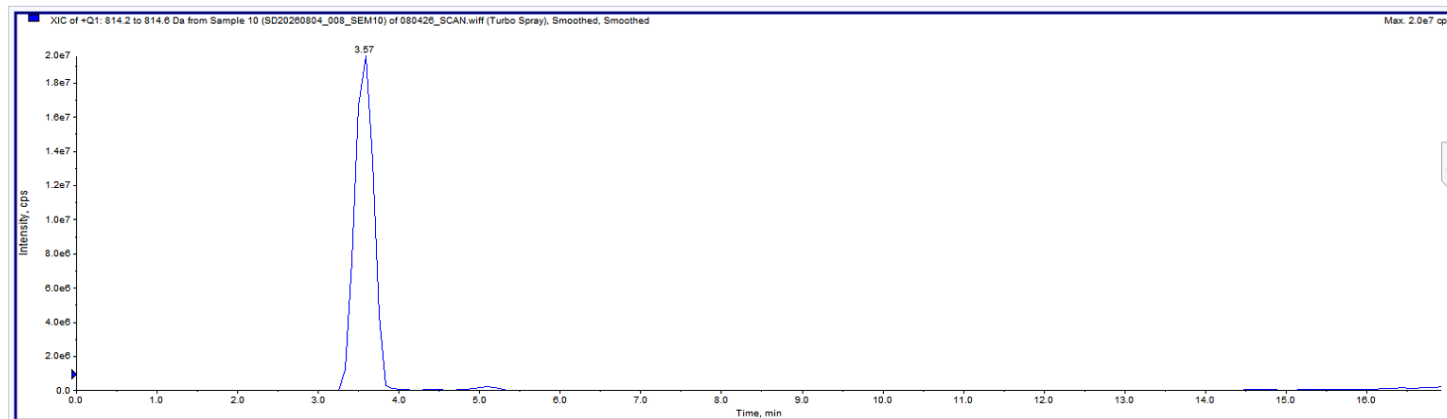
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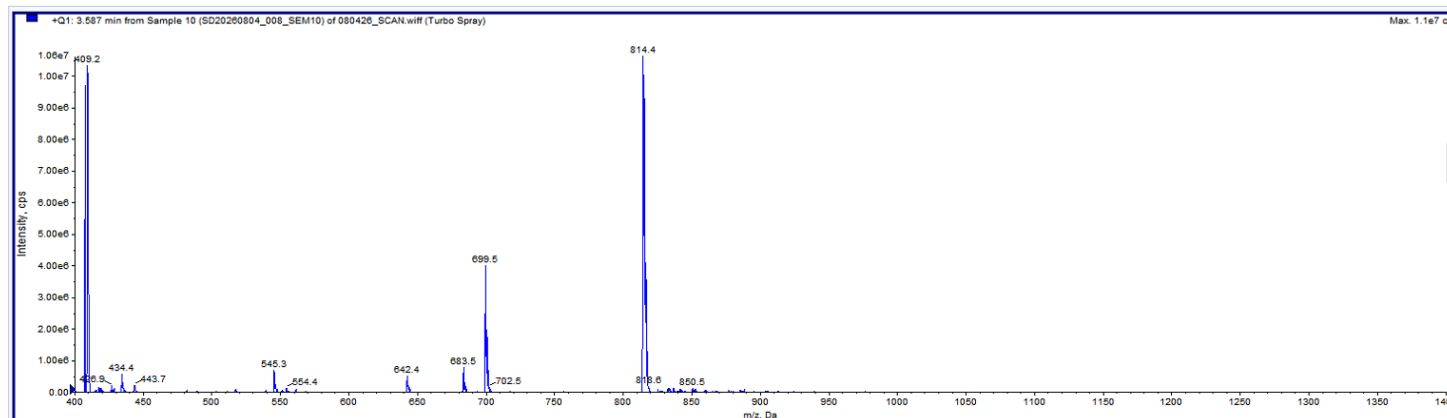
ANALYTICAL DATA

COA #: **SD20260804_008_SEM10**

CHROMATOGRAM



MASS SPECTRUM (LC-MS)



John Humes, MS.

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Analyzed by · Laboratory Analyst · 08/05/2026

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ANALYTICAL INTERPRETATION

Chromatogram

Retention Time Match

Mass Spectrum (LC-MS)

Identity (LC-MS, Q1 scan – Semax):

A positive-mode Q1 full scan acquired at 3.59 min from the Semax sample shows a dominant precursor ion at m/z 814.4, consistent with the expected +1 charge state of Semax under the validated LC-MS conditions. Additional ions at m/z 409.2, 434.4, 443.7, 546.3, 554.4, 642.4, 699.5, 702.5, 818.6, and 850.5 are observed and correspond to alternative charge states, isotopic peaks, and adducts of the same peptide species. The observed mass profile and charge-state distribution match the theoretical precursor ion pattern for Semax within the established tolerance window, supporting confirmation of analyte identity in this sample.

John Humes, MS.

John Humes, MS.

Analyzed by · Laboratory Analyst · 08/05/2026

Chetan Soni, PhD.

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