

Certificate of Analysis

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Sample Identification

Sample Name Semax 10 mg
Batch Number 2025282
Date Published 2026-05-28 13:52

Results for LYO-0180

| Peptides | Result | Unit | Uncertainty | Acceptable Range |
|--|--------|------|-------------|------------------|
| Semax Assay Peptide Screening 0.1% TFA | 12.46 | mg | [± 0.06] | |
| Semax Purity Peptide Screening 0.1% TFA | 99.6 | % | [± 0.5] | |
| Semax Identification by Spectrum (FTIR) Peptide Screening 0.1% TFA | 998 | | [± 5] | |
| Semax Identification by RT Peptide Screening 0.1% TFA | 0.983 | | [± 0.005] | |

| | | |
|---|---------------------------------|-----------------------------|
|  | Method Specification | |
| Determination of identity, content and purity of Semax | | |
| <i>Document number</i> SEMAX_003_2026 | <i>Superseded document</i> - | <i>Number of pages</i> 3 |

1. Content Assesment

1.1. Instrumentation

| Module | Name | Serial Number |
|-------------------|---------------------|---------------|
| System Controller | Shimadzu CBM-20A | L20235355693 |
| Degassing Unit | Shimadzu DGU-14A | NA |
| Pump A | Shimadzu LC-20AD | L20104350216 |
| Pump B | Shimadzu LC-20AD | L20104451348 |
| Autosampler | Shimadzu SIL-10ADvp | C21054109114 |
| Colum Thermostat | Shimadzu CTO-10ACvp | C21033770144 |
| Detector | Shimadzu SPD-10ADvp | C20994233588 |

1.2. Chromatographic conditions

| Chromatographic conditions | |
|----------------------------|--|
| Eluent A | 0.1% TFA in Water (HPLC, Gradient Grade) |
| Eluent B | 0.1% TFA in Acetonitrile (HPLC, Gradient Grade) |
| Flow rate | 0.4 mL/min |
| Program | Gradient elution |
| Injection volume | 0.5 µL |
| Colum Temperature | 60°C |
| Column | Phenomenex Biozen Peptide Polar C18, 150x2.1mm 3µm |
| Detection wavelength | 214nm |

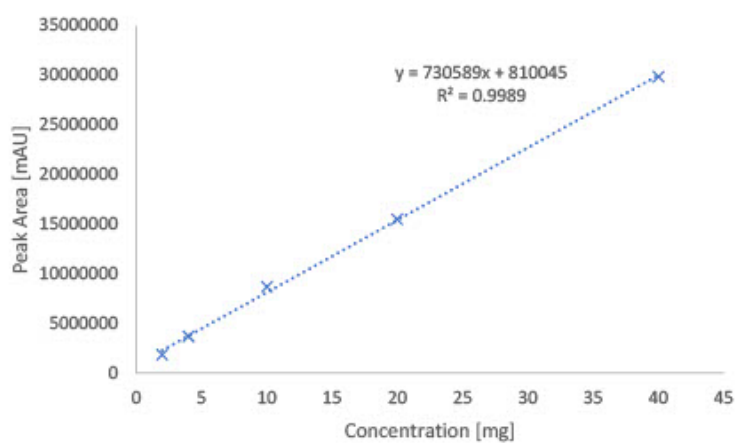
| Gradient Program | | |
|------------------|-------|-------|
| Time [min] | A [%] | B [%] |
| 1 | 95 | 5 |
| 20.50 | 5 | 95 |
| 21.00 | 5 | 95 |
| 21.05 | 95 | 5 |
| 26 | end | |

1.3. Sample preparation

Whole amount of container was dissolved in 2mL of water (HPLC, Gradient Grade). Aliquote part of 1 mL was dispensed into HPLC vial for analysis.

1.4. Calibration curve

| Calibration curve detail | |
|------------------------------|-------------------|
| Quantitative method | External Standard |
| Calibration Type | Linear |
| Number of calibration points | 5 |
| Force through Zero | Disabled |
| Weighting Method | None |



2. Purity assessment

2.1 Instrumentation

| Module | Name | Serial Number |
|-------------------|---------------------|---------------|
| System Controller | Shimadzu CBM-20A | L20235355693 |
| Degassing Unit | Shimadzu DGU-14A | NA |
| Pump A | Shimadzu LC-20AD | L20104350216 |
| Pump B | Shimadzu LC-20AD | L20104451348 |
| Autosampler | Shimadzu SIL-10ADvp | C21054109114 |
| Colum Thermostat | Shimadzu CTO-10ACvp | C21033770144 |
| Detector | Shimadzu SPD-10ADvp | C20994233588 |

2.2 Chromatographic conditions

| Chromatographic conditions | |
|----------------------------|--|
| Eluent A | 0.1% TFA in Water (HPLC, Gradient Grade) |
| Eluent B | 0.1% TFA in Acetonitrile (HPLC, Gradient Grade) |
| Flow rate | 0.4 mL/min |
| Program | Gradient elution |
| Injection volume | 0.5 µL |
| Colum Temperature | 60°C |
| Column | Phenomenex Biozen Peptide Polar C18, 150x2.1mm 3µm |
| Detection wavelength | 214nm |

| Gradient Program | | |
|------------------|-------|-------|
| Time [min] | A [%] | B [%] |
| 1 | 95 | 5 |
| 20.50 | 5 | 95 |
| 21.00 | 5 | 95 |
| 21.05 | 95 | 5 |
| 26 | end | |

1.5. Sample preparation

Whole amount of container was dissolved in 2mL of water (HPLC, Gradient Grade). Aliquote part of 1 mL was dispensed into HPLC vial for analysis.

1.6. Purity assesment

Purity of compound assesed by area normalization method, comparing area of each peak to sum of area of all peaks detected at wavelenght of 214 nm.

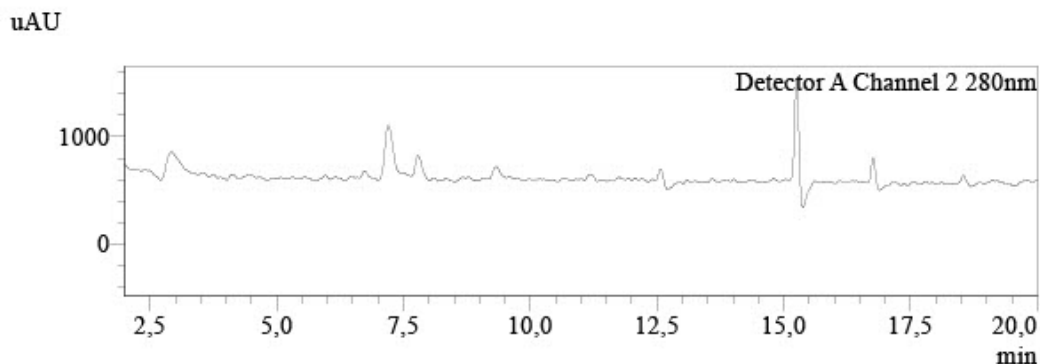
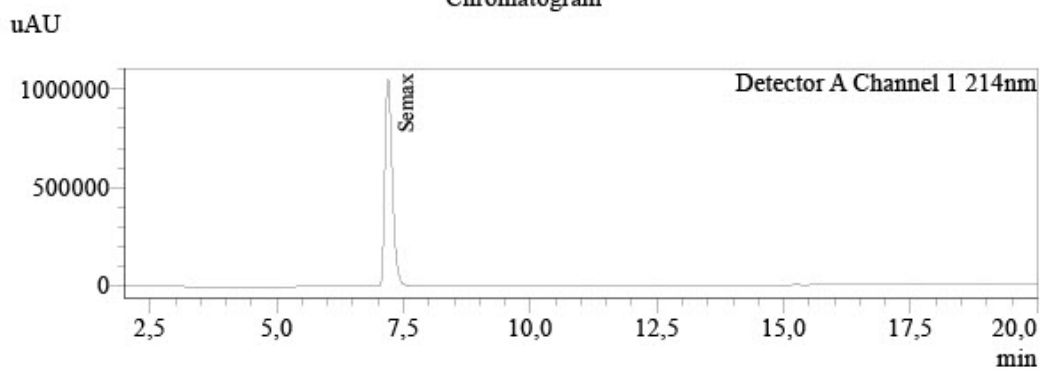
Analysis Report



Sample Information

Injection Volume : 0,5
Data File : LYO-0180_016.lcd
Method File : Peptide screening_202602_Goup E.lcm
Date Acquired : 27.05.2026 23:43:05

Chromatogram



Peak Table

| Detector A Channel 1 214nm | | | | | |
|----------------------------|-------|-----------|--------|------|---------|
| Peak# | Name | Ret. Time | Conc. | Unit | Area% |
| 1 | | 6.792 | 0.000 | | 0.107 |
| 2 | Semax | 7.194 | 12.459 | mg | 99.573 |
| 3 | | 7.782 | 0.000 | | 0.146 |
| 4 | | 8.260 | 0.000 | | 0.060 |
| 5 | | 9.010 | 0.000 | | 0.062 |
| 6 | | 9.318 | 0.000 | | 0.052 |
| Total | | | | | 100.000 |

Peak Table

| Detector A Channel 2 280nm | | | | |
|----------------------------|------|-----------|-------|------|
| Peak# | Name | Ret. Time | Conc. | Unit |
| Total | | | | |

Responsibles



Mr. Ján Galbavý
CEO

Analysis results relate only to the samples tested.

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