# Certificate of Analysis

**ILS Laboratories**
8222 Vickers St, Suite 106, San Diego, CA 92111
(619) 329-3999 | ils-lab.com

## Semax - 10mg

**Tested for: Trulixir Peptides LLC**

**PASS**

Scan to verify authenticity at ils-lab.com
**Access Code: 2FZSBZK2**

| | | | |
|---|---|---|---|
| COA #: | **COA-2026-CEW4MB** | Analysis Date: | **07/13/2026** |
| Lot Number: | **TP-SEMAX-010-02** | Appearance: | **Good** |
| Accession #: | **ACC-2026-7441** | Sample Matrix: | **Lyophilized** |
| Labeled Content: | **10mg** | Vial Size: | **3mL** |
| | | Date Received: | **07/01/2026** |

Method: **Full QC Panel**

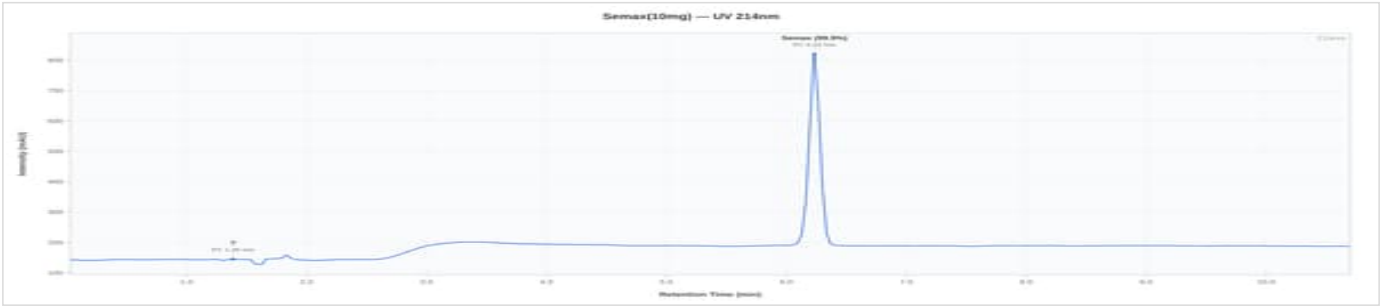
| Identity | Peptide Purity | |
|---|---|---|
| **Semax** | **99.94%** | **Fentanyl Free** |

*Semax 10mg - TP-SEMAX-010-02*

### Full QC Panel

| Analyte | Specification | Result | Unit | Status |
|---|---|---|---|---|
| **Peptide Purity (HPLC)** | >= 95.0% | **99.94%** | % | **PASS** |
| **Net Peptide Content** | Report Only | **10.48** | mg | N/A |
| **Identity (HPLC-RTM)** | Semax | **Confirmed** | - | **PASS** |
| **Fentanyl Screen** | Immunoassay, 50 ng/mL cutoff | **Not Detected** | - | **PASS** |

### HPLC Chromatogram




*Semax 10mg - TP-SEMAX-010-02: UV Chromatogram*

### Heavy Metals Analysis (ICP-MS)

| Test | Specification | Result | Status |
|---|---|---|---|
| **Arsenic (As)** | NMT 1.5 ppm | *Not Detected* | **PASS** |
| **Cadmium (Cd)** | NMT 0.5 ppm | *Not Detected* | **PASS** |
| **Chromium (Cr)** | NMT 10 ppm | *Not Detected* | **PASS** |
| **Mercury (Hg)** | NMT 1.5 ppm | *Not Detected* | **PASS** |
| **Lead (Pb)** | NMT 1 ppm | *Not Detected* | **PASS** |

**Dr. Greg Kalyuzhny**
Lab Director
7/13/2026

COA #: **COA-2026-CEW4MB**
Access Code: **2FZSBZK2**
Verify: portal.ils-lab.com/verify/PdMYM9feeTwwlErc
Issued: 7/13/2026




ISO/IEC 17025 Accredited | This certificate relates only to the items tested. Results shall not be reproduced except in full without written approval.

## Sterility Testing (PCR)

| Test | Specification | Result | Status |
|---|---|---|---|
| **Sterility (PCR)** | No Growth | **No Growth** | **PASS** |

## Endotoxin Testing (USP <85>)

| Test | Specification | Result | Status |
|---|---|---|---|
| **Endotoxin (USP <85>)** | Report Result | **0.077 EU/mL** | **Reported** |

*About this result: Endotoxin is reported as a quantitative value. Acceptable limits vary by product type and matrix, so no universal pass/fail threshold applies to RUO products. This result is below commonly referenced endotoxin thresholds.*

### Notes & Methodology

1. Date Tested: 07/13/2026. Methods: Full QC Panel.
2. The sample was confirmed to be Semax by HPLC. Identification by chromatographic retention time comparison with a reference standard.
3. Elemental impurities analyzed by ICP-MS per USP <233> methodology. Acceptance criteria are internal laboratory quality screening limits for research-use materials and do not represent evaluation against any specific pharmacopeial monograph or product specification.
4. Endotoxin tested per USP <85> kinetic turbidimetric method. Acceptance criteria per client specification.
5. Peptide purity determined by RP-HPLC area normalization at 214 nm. Value represents the percentage of the target peptide relative to all peptide-related peaks. Non-peptide process-related impurities, if detected, are excluded from the calculation.

**Dr. Greg Kalyuzhny**
Lab Director
7/13/2026

COA #: **COA-2026-CEW4MB**
Access Code: **2FZSBZK2**
Verify: portal.ils-lab.com/verify/PdMYM9feeTwwlErc
Issued: 7/13/2026



ILS Laboratories | 8222 Vickers St, Suite 106, San Diego, CA 92111 | (619) 329-3999 | ils-lab.com
ISO/IEC 17025 Accredited | This certificate relates only to the items tested. Results shall not be reproduced except in full without written approval.