# Certificate of Analysis

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

## TB-500 10 mg - 10mg

**7X TESTED**

**PASS**

**Tested for: Lumen Peptides**
Lumenpeptides.com

| | | | |
|---|---|---|---|
| COA #: | **COA-2026-UQSPTL** | Analysis Date: | **10/22/2026** |
| Lot Number: | **TB-111926-10** | Appearance: | **Good** |
| Accession #: | **ACC-2026-23466** | Sample Matrix: | **Lyophilized** |
| Labeled Content: | **10mg** | Volume: | **10mg** |
| | | Date Received: | **10/19/2026** |

Scan to verify authenticity at ils-lab.com
**Access Code: U547NB4G**

Method: **Full QC Panel**

| Identity | Peptide Purity | |
|---|---|---|
| **TB-500 10 mg** | **99.36%** | Fentanyl Free |

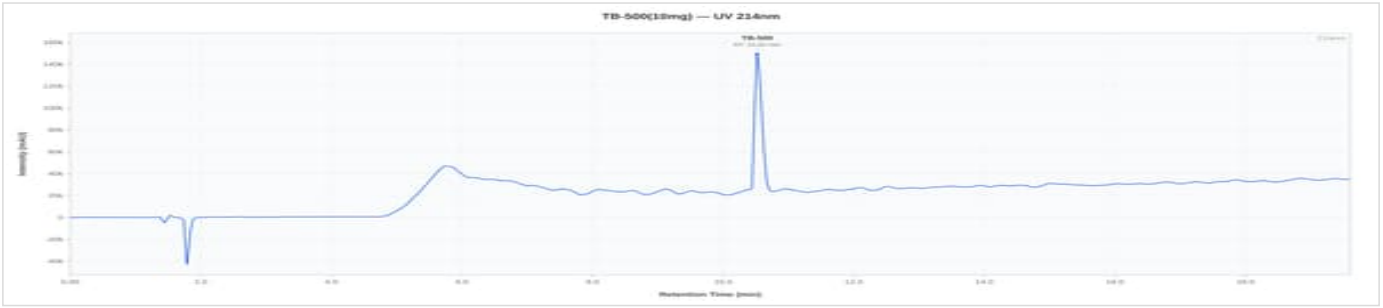


*TB-500 10 mg 10mg - TB-111926-10*

### Full QC Panel

| Analyte | Specification | Result | Unit | Status |
|---|---|---|---|---|
| **Peptide Purity (HPLC)** | >= 95.0% | **99.36%** | % | **PASS** |
| **Net Peptide Content** | Report Only | **10.58** | mg | N/A |
| **Identity (HPLC-RTM)** | TB-500 | **Confirmed** | - | **PASS** |
| **Fentanyl Screen** | Immunoassay, 50 ng/mL cutoff | **Not Detected** | - | **PASS** |

### HPLC Chromatogram



*TB-500 10 mg 10mg - TB-111926-10: 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** |
| **Lead (Pb)** | NMT 1.0 ppm | *Not Detected* | **PASS** |
| **Mercury (Hg)** | NMT 1.5 ppm | *Not Detected* | **PASS** |
| **Chromium (Cr)** | NMT 10.0 ppm | *Not Detected* | **PASS** |

## 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 | **NMT 0.05 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: 10/22/2026. Methods: Full QC Panel.
2. The sample was confirmed to be TB-500 10 mg 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 chromogenic 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.
6. Quality System: ILS Laboratories operates an ISO/IEC 17025 quality management system. Peptide testing is performed for Research Use Only.
7. This certificate reports analytical results for the sample(s) submitted to ILS Laboratories for testing. All sample identifications, product names, brand names, lot/batch numbers, and labeled content are provided by the submitting party and have not been independently verified. Results reflect only the analytical testing of the specific sample(s) provided and do not constitute an evaluation or endorsement of the manufacturer's processes, quality systems, or overall production. ILS Laboratories makes no representations regarding the intended use, safety, efficacy, regulatory status, or intellectual property ownership of any materials tested.

ILS LABS

**Issued by ILS Laboratories**

(619) 329-3999

ils-lab.com

**Dr. Greg Kalyuzhny**

Lab Director

10/22/2026

COA #: **COA-2026-UQSPTL**

Access Code: **U547NB4G**

Verify: portal.ils-lab.com/verify/J-fXvPJ7giiaSHBo

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