

## ILS Laboratories

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

## MOTS-C - 40mg

Tested for: Synthesis Peptides

**PASS**

COA #: COA-2026-954543  
Lot Number: MOT40726  
Accession #: ACC-2026-6951  
Labeled Content: 40mg

Analysis Date: 07/24/2026  
Appearance: Good  
Sample Matrix: Lyophilized  
Volume: 3mL  
Date Received: 06/29/2026



Scan to verify  
authenticity at ils-lab.com  
Access Code: QXKP2YBQ

Method: Full QC Panel

Identity

**MOTS-C**

Peptide Purity

**99.89%**



Fentanyl  
Free

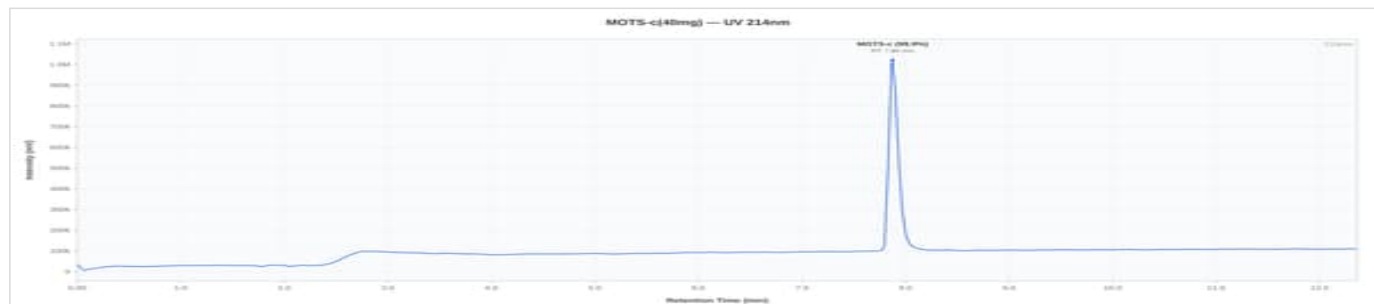
## Purity, Identity & Quantitation (HPLC)

| Analyte               | Specification                | Result       | Unit | Status |
|-----------------------|------------------------------|--------------|------|--------|
| Peptide Purity (HPLC) | >= 95.0%                     | 99.89%       | %    | PASS   |
| Net Peptide Content   | Report Only                  | 41.04        | mg   | N/A    |
| Identity (HPLC-RTM)   | MOTS-c                       | Confirmed    | -    | PASS   |
| Fentanyl Screen       | Immunoassay, 50 ng/mL cutoff | Not Detected | -    | PASS   |



MOTS-C 40mg - MOT40726

## HPLC Chromatogram



Representative chromatogram, Dedicated V0

## HPLC Conformity Testing Results (4 samples tested)

| Sample        | Purity  | NPC       | ID        | Result |
|---------------|---------|-----------|-----------|--------|
| Dedicated V0  | 99.77%  | 41.14 mg  | Confirmed | PASS   |
| Conformity V1 | 99.78%  | 41.95 mg  | Confirmed | PASS   |
| Conformity V2 | 99.62%  | 41.07 mg  | Confirmed | PASS   |
| Conformity V3 | 99.89%  | 41.04 mg  | Confirmed | PASS   |
| Mean          | 99.77%  | 41.30 mg  | —         | —      |
| Std Dev       | 0.0960% | 0.3770 mg | —         | —      |



*Dr. Greg Kalyuzhny*

**Dr. Greg Kalyuzhny**  
Lab Director  
7/30/2026

COA #: COA-2026-954543  
Access Code: QXKP2YBQ  
Verify: <portal.ils-lab.com/verify/13dmxLe4OqvOBsTQ>  
Issued: 7/30/2026

Heavy Metals Analysis (ICP-MS)

| Test          | Specification | Result | Status |
|---------------|---------------|--------|--------|
| Arsenic (As)  | NMT 1.5 ppm   | 0      | PASS   |
| Cadmium (Cd)  | NMT 0.5 ppm   | 0      | PASS   |
| Lead (Pb)     | NMT 1.0 ppm   | 0      | PASS   |
| Mercury (Hg)  | NMT 1.5 ppm   | 0      | PASS   |
| Chromium (Cr) | NMT 10.0 ppm  | .048   | 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>) | NMT 5 EU/mL   | NMT 0.05 EU/mL | PASS   |

Acceptance criteria: NMT 5 EU/mL per client specification.

Notes & Methodology

1. Date Tested: 07/30/2026. Methods: Purity, Identity & Quantitation (HPLC).
2. The sample was confirmed to be MOTS-C 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.
6. Chromatogram shown is representative: Dedicated V0 (99.77% purity, closest to batch mean of 99.77%).



  
**Dr. Greg Kalyuzhny**  
Lab Director  
7/30/2026

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