Customer:
OROS Research

EA Sample ID: 26EA0827-040
Sample Name: MOTS-C 50mg
Sample Type: Powder
Batch/Lot: OR-LPMOTS50-826-B1

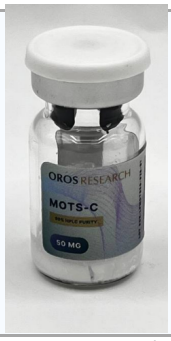
Date Received:
09/01/2026
Date Completed:
09/10/2026

ETHOS ANALYTICS

# CERTIFICATE OF ANALYSIS

## Summary of Results

| Analysis Type | Method | Date Tested | Status |
|---|---|---|---|
| MOTS-c | HPLC | 09/04/2026 | Complete |
| Bacterial Endotoxins | USP <85> | 09/10/2026 | Complete |
| Residual Solvents | USP <467> | 09/10/2026 | Complete |
| Fentanyl | USP <2251> | 09/10/2026 | Complete |
| Heavy Metals | ICP-MS | 09/03/2026 | Pass |
| Microbiological | Petrifilm/qPCR | 09/04/2026 | Pass |




Serving Size: N/A

## Label Claim Profile

| Analyte | Result | Specification | LOD |
|---|---|---|---|
| **MOTS-c** | Vial 1 = 53.18mg/vial | 50mg/vial | 0.1% |
| **MOTS-c** | Vial 2 = 52.91mg/vial | 50mg/vial | 0.1% |
| **Average** | 53.05 mg/vial | 50mg/vial | N/A |
| **Identity of the analyte was confirmed by retention time concordance with a certified reference standard, per USP <621>.** | | | |
| **Chromatographic Purity Vial 1** | >99% | >99% | 0.1% |
| **Chromatographic Purity Vial 2** | >99% | >99% | 0.1% |
| **Bacterial Endotoxins (Gel-Clot: 1:10 Dilution)** | <1.25 EU/ml | <5 EU/ml | λ = 0.125 EU/mL |
| **Fentanyl** | Vial 1 = Not Detected | <LOD | 10ppm |
| **Fentanyl** | Vial 2 = Not Detected | <LOD | 10ppm |
| **Acetonitrile** | <LOD | <410ppm | 300ppm |
| **Methanol** | <LOD | <3000ppm | 500ppm |
| **DMF (N,N-Dimethylformamide)** | <LOD | <880ppm | 300ppm |
| **Dichloromethane (Methylene Chloride)** | <LOD | <600ppm | 300ppm |
| **Diethyl Ether (Ethyl Ether)** | <LOD | <5000ppm | 500ppm |
| **Isopropanol (2-Propanol)** | <LOD | <5000ppm | 500ppm |
| **Ethanol** | <LOD | <5000ppm | 500ppm |
| **THF (Tetrahydrofuran)** | <LOD | <720ppm | 300ppm |
| **TFA (Trifluoroacetic acid)** | <LOD | Report Only | 500ppm |

NOTES: Lyophilized samples may include acceptable salts, sugars, or buffering agents added to improve solubility and stability. These excipients are non-chromophoric, typically not detected by HPLC, and are not considered impurities. Two vials were independently tested to evaluate batch consistency and vial-to-vial variability.

LOD = LIMIT OF DETECTION; LOQ = LIMIT OF QUANTIFICATION

ETHOS ANALYTICS
Ethos Analytics Laboratory
3020 E Camelback Rd STE 397
Phoenix, AZ 85016
Info@Ethosanalytics.io
www.Ethosanalytics.io
Lic #: 000026LRCND60176649
ISO/IEC 17025 Acc #: 117798

Noel Samsum
Laboratory Director
10-Sep-2026

The sample analyzed was inspected and is free from visual mold, mildew, and foreign matter. The testing procedures, equipment calibration, and maintenance are all in accordance with ISO/IEC 17025:2017 standards. The presented report is only applicable to the sample specified above and may not be applied to any similar or identical products. Reports are prohibited from being reproduced with alterations of any kind.

Customer:
OROS Research

EA Sample ID: 26EA0827-040
Sample Name: MOTS-C 50mg
Sample Type: Powder
Batch/Lot: OR-LPMOTS50-826-B1

Date Received:
09/01/2026
Date Completed:
09/10/2026

ETHOS ANALYTICS

# CERTIFICATE OF ANALYSIS

## Heavy Metal Analysis (USP <233>)

| Analyte | Result (mcg/vial) | LOQ (ppm) | LOD (ppm) | Limit (mcg/day) | Pass/Fail |
|---|---|---|---|---|---|
| **Arsenic** | **<LOQ** | 0.010 | 0.005 | 0.5 | Pass |
| **Cadmium** | **<LOQ** | 0.010 | 0.005 | 0.1 | Pass |
| **Lead** | **<LOQ** | 0.010 | 0.005 | 0.5 | Pass |
| **Mercury** | **<LOQ** | 0.010 | 0.005 | 0.1 | Pass |

## Microbiological Analysis (USP <61>, USP <62>)

| Microbe | Result | Limit | Pass/Fail |
|---|---|---|---|
| **Total Aerobic Plate** | **<10 CFU/g** | <100 CFU/g | Pass |
| **Coliform** | **<10 CFU/g** | <10 CFU/g | Pass |
| **Bile-Tolerant Gram-Negative Bacteria** | **<10 CFU/g** | <10 CFU/g | Pass |
| **Yeast and Mold** | **<10 CFU/g** | <10 CFU/g | Pass |
| **Escherichia Coli** | **Negative/1g** | Negative/1g | Pass |
| **Salmonella** | **Negative/1g** | Negative/1g | Pass |
| **Staphylococcus Aureus** | **Negative/1g** | Negative/1g | Pass |

NOTES:

CFU = Colony Forming Unit
NS = Not Specified
NT = Not Tested

LOQ = Limit of Quantification
LOD = Limit of Detection

ETHOS ANALYTICS
Ethos Analytics Laboratory
3020 E Camelback Rd STE 397
Phoenix, AZ 85016
Info@Ethosanalytics.io
www.Ethosanalytics.io
Lic #: 000026LRCND60176649
ISO/IEC 17025 Acc #: 117798

**Noel Samsum**
**Laboratory Director**
**10-Sep-2026**

The sample analyzed was inspected and is free from visual mold, mildew, and foreign matter. The testing procedures, equipment calibration, and maintenance are all in accordance with ISO/IEC 17025:2017 standards. The presented report is only applicable to the sample specified above and may not be applied to any similar or identical products. Reports are prohibited from being reproduced with alterations of any kind.