FREEDOM DIAGNOSTICS

Certificate of Analysis

FreedomDiagnosticsTesting.com
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Client:	Halo Research Labs LLC
Accession #:	2610291273
Search Code:	Halo2610291273
Received:	10/29/2026
Reported:	11/2/2026
Lot:	MC4002

Sample Summary

Product:	**MOTS-c 40mg**	Purity:	**Sample 1: 99.12%** **Sample 2: 99.09%**
Identity:	**Confirmed**	Net Content:	**Sample 1: 40.83 mg** **Sample 2: 37.02 mg**
Appearance:	**White Lyophilized Powder**		
Endotoxin Threshold:	**Pass**		
Microbial Analysis (PCR):	**Pass**		
Elemental Impurities (ICP-MS): As | Cd | Pb | Hg	**Pass**		
Fentanyl	**No Fentanyl Detected**		
Ph	**5.6**		

Analytical Results

Test	Result
Identity (LC-MS)	**MOTS-C**
Purity (HPLC-UV)	**99.10%**
Elemental Impurities (ICP-MS):	**Pass — Arsenic, Cadmium, Lead and Mercury below limits**
Net Content	**38.93 mg**

Method: Endotoxin testing performed using Limulus Amebocyte Lysate assay in accordance with USP <85> under validated laboratory conditions.

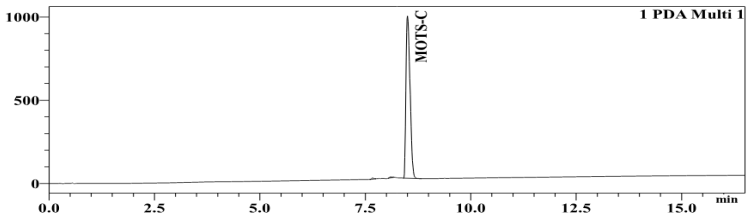
Endotoxin Replicate 1:	**Pass**	Assay Sensitivity: ≤0.05 EU/mL
Endotoxin Replicate 2:	**Pass**	Assay Sensitivity: ≤0.05 EU/mL

Method: Microbial detection performed using validated polymerase chain reaction (PCR)-based assay targeting common microbial contaminants.

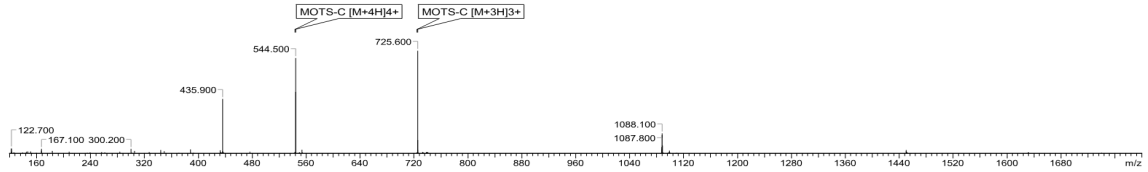
Microbial Analysis (PCR)	**No Detectable Microbial DNA**

Method: HPLC with UV detection coupled with mass spectrometry (LC-MS).

Chromatogram



Mass Confirmation



Alex Johnson

Principal Chemist
CoA Template v3.1

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The peptide purity analysis reported here was conducted using LCMS/MS under standard laboratory conditions. This analysis is for informational purposes only and is specific to the sample(s) provided. The peptides tested are for research use only and are not approved for human, veterinary, diagnostic, therapeutic, or clinical use. Results should be interpreted by qualified professionals. Accuracy may be influenced by sample integrity, handling, and other experimental variables.