Meridian Assay

Independent analytical testing - Cambridge MA

TASK NO.
R8TLX6X
Report MA-MOT-0022 - Rev. 01

CERTIFICATE OF ANALYSIS

MOTS-c - 20 mg

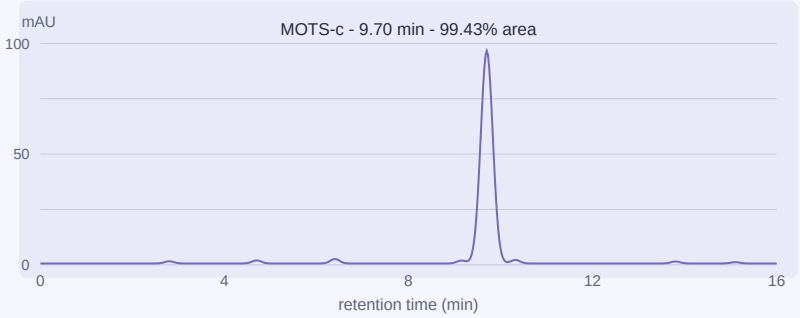
Mitochondrial-derived 16-residue peptide - lyophilised

Material	MOTS-c	Client	novumpeptides.com	Received	2026-06-11 at 2-8 C
Batch / lot	MOT-22-X6X	Label claim	20 mg	Analysed	2026-06-12 to 2026-06-13

TEST RESULTS

ATTRIBUTE	RESULT	SPECIFICATION	METHOD	VERDICT
Identity	**Conforms**	Matches reference	MA-MS-014 / LC-HRMS	Conforms
Purity (area %)	**99.43%**	>= 99.00%	MA-UHPLC-031 / UV 214	Pass
Largest single impurity	**0.17%**	<= 0.50%	MA-UHPLC-031 / UV 214	Pass
Total related substances	**0.57%**	<= 1.00%	MA-UHPLC-031 / UV 214	Pass
MOTS-c per vial	**19.98 mg**	18.00-22.00 mg	MA-ASSAY-011 / UHPLC-UV	Pass
Water content	**4.21%**	<= 8.00%	MA-KF-004 / Karl Fischer	Pass
Residual acetonitrile	**184 ppm**	<= 410 ppm	MA-GC-006 / HS-GC-FID	Pass
Residual TFA	**0.10%**	<= 1.00%	MA-IC-003 / ion chromatography	Pass

RP-UHPLC processed trace, UV detection



Record R8TLX6X-PEP-01; duplicate independent preparations. System suitability met retention-time and resolution criteria; blank response was below threshold.

Related species > 0.05%

deletion sequence	0.17%
insertion sequence	0.13%
diastereomeric variant	0.09%
N-terminal variant	0.07%
C-terminal variant	0.05%
unresolved peaks	0.06%

Related species were assigned by orthogonal reference comparison and mass-spectrometric or chromatographic evidence. Mean area percentages; reporting threshold 0.05%.

Conclusion

Identity and quality attributes met the stated criteria. Mean MOTS-c content was 19.98 mg/vial and chromatographic purity was 99.43%.

Identity was established by LC-HRMS against a qualified reference; content and related substances were assessed independently.

Analytical review
Ines Abadi I.Abadi

Quality review
Marcus Oyelaran
Approval date: 2026-06-14 M.Oyelaran

Decision rule: guarded acceptance; reported outcomes account for method uncertainty and remain within the stated project specifications.