



Vita Science Peptides Inc.

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Certificate of Analysis

CERTIFICAT D'ANALYSE

Document B7DD806CA5 · Lot MC-2609-41 · Issued / Émis September
21, 2026

MOTS-c 20 mg Lyophilized Vial, ≥99% by HPLC

Lyophilized powder in a sealed 3 mL glass vial · 20 mg per vial



Verify this lot / Vérifier ce lot
canada-peptides.net/lots/#mc-2609-41

Catalogue no. / N° de catalogue	PEP-MOTSC-20	Lot / Lot	MC-2609-41
Date of analysis / Date d'analyse	September 21, 2026	Retest date / Date de réanalyse	September 21, 2028
CAS	1627580-64-6	Molecular formula / Formule	C101H152N28O22S2
Molecular weight / Masse moléculaire	2174.6 g/mol	Quantity / Quantité	20 mg per vial
Form / Forme	Lyophilized powder in a sealed 3 mL glass vial	Storage / Conservation	Lyophilized powder: store sealed at -20 °C, protected from light and moisture. Ships at ambient temperature with desiccant.

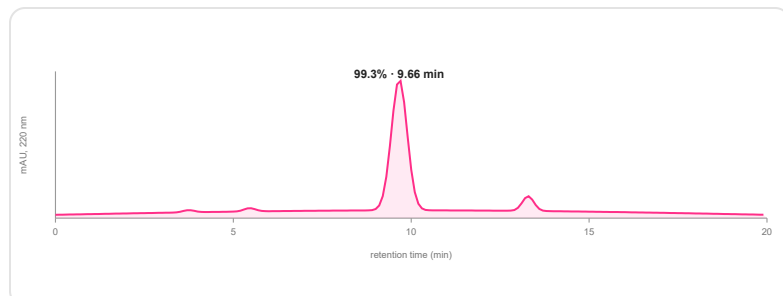
SEQUENCE / SÉQUENCE

MRWQEMGYIFYPRKLR

RESULTS / RÉSULTATS

TEST / ESSAI	METHOD / MÉTHODE	SPECIFICATION / SPÉCIFICATION	RESULT / RÉSULTAT
Appearance / Apparence	Visual, USP <631>	White to off-white lyophilized powder	White lyophilized powder
Purity / Pureté	RP-HPLC, C18, 220 nm, area %	≥99%	99.3%
Identity / Identité	ESI-MS, positive mode	[M+H] ⁺ 2175.61 ± 0.1%	[M+H] ⁺ 2175.57 (Δ 0.002%)
Net peptide content / Teneur nette	Gravimetric, corrected for water and counter-ion	20 mg per vial	20.28 mg (100.7% of label)
Water content / Teneur en eau	Karl Fischer titration	≤ 8.0%	2.4%
Counter-ion / Contre-ion	Ion chromatography	Acetate, TFA below 1%	6.1% acetate
Bacterial endotoxin / Endotoxine	LAL, kinetic turbidimetric	< 1.0 EU/mg	< 0.34 EU/mg

CHROMATOGRAM / CHROMATOGRAMME



PEAK	RT (MIN)	AREA %	ASSIGNMENT / ATTRIBUTION
1	3.75	0.08	Related impurity

MASS SPECTRUM / SPECTRE DE MASSE



METHODS / MÉTHODES

PEAK	RT (MIN)	AREA %	ASSIGNMENT / ATTRIBUTION
2	5.46	0.11	Related impurity
3	9.66	99.30	MOTS-c 20 mg Lyophilized Vial (main peak)
4	13.29	0.51	Related impurity

RP-HPLC. Reversed-phase HPLC on a C18 column with a water/acetonitrile gradient (0.1% TFA), detection at 220 nm; purity is the main peak area as a percentage of the total peak area.

ESI-MS. Electrospray ionization mass spectrometry in positive mode; identity is confirmed when the observed [M+H]⁺ (or [M+2H]²⁺) ion lies within 0.1% of the calculated mass.

Karl Fischer. Coulometric titration of a weighed aliquot for water content, reported as a percentage of the lyophilized mass.

Ion chromatography. Counter-ion content (acetate, residual trifluoroacetate) by anion-exchange chromatography with conductivity detection.

LAL. Kinetic turbidimetric Limulus amebocyte lysate assay for bacterial endotoxin, reported per milligram of peptide.

Analyst / Analyste

QC laboratory · signed electronically
September 21, 2026

Reviewed / Vérifié

QC reviewer · signed electronically
September 21, 2026

Released / Libéré

Quality assurance · released for sale
Document B7DD806CA5

For laboratory research use only. Not for human or veterinary use. · Réservé à la recherche en laboratoire. Non destiné à l'usage humain ou vétérinaire.

This certificate reports the lot record held by Vita Science Peptides for lot MC-2609-41; results apply to that lot only. Document B7DD806CA5 can be checked against the lot register at <https://canada-peptides.net/lots/#mc-2609-41>. Store as stated above; retest date September 21, 2028. Generated 2026-09-24 · <https://canada-peptides.net>