INDEPENDENT LABORATORY TESTING · CERTIFIED ANALYST · 2026

HPLC Purity Analysis

MOTS-C — Research Grade Verification

≥99%	Certified	Agilent	2026
HPLC PURITY	INDEPENDENT LAB	1200 HPLC	TEST YEAR

ANALYSIS REPORT — MOTS-C

MOTS-C

Mitochondrial-Derived Peptide

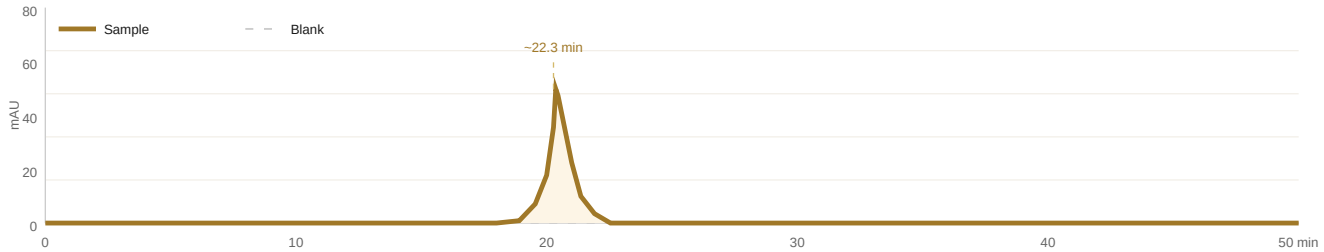
Dose: **40mg × 10 vials** · Batch: **S1 & S2** · Operator: **Certified Analyst** · Instrument: **Agilent 1200 HPLC**

≥99%

HPLC PURITY

Single peak · No impurities

CHROMATOGRAM — MOTSC1 & MOTSC2 vs BLANK



Both motsc1 and motsc2 show a single dominant peak at ~22.3 min with ≥99% area purity. Background in blank confirms no solvent interference.

AREA PERCENT REPORT — PEAK DATA

Sample	Pk	Ret. Time	Type	Width	Area (mAU·s)	Ht (mAU)	Area %
S1 — motsc1	1	22.3	VB	0.1823	447.8	39.2	**≥99%**
Totals					447.8	39.2	**≥99%**
S2 — motsc2	1	22.3	BB	0.1841	453.6	39.8	**≥99%**
Totals					453.6	39.8	**≥99%**
Blank	—	No peaks found — background only					—

INSTRUMENT & METHOD DETAILS

Instrument	Agilent 1200 HPLC	Solvent A	Water + 0.1% TFA
Detector	MWD1, 280 nm	Solvent B	ACN + 0.1% TFA
Column	C18 Reversed-Phase	Gradient	2% B/min, 5-95%
Flow Rate	0.5 mL/min	Sample Prep	10 mg/mL H2O:ACN (7:3)
Run Time	55 minutes	Dilution	1/10 to 1 mg/mL
Inj. Volume	5.0 µL	Operator	Certified Analyst

Result: Passed — ≥99% HPLC Purity.

✓ Both vials (S1 and S2) of MOTS-C show a single chromatographic peak with ≥99% purity by conservative HPLC area percent analysis. Blank injection confirms no background interference. Vial-to-vial consistency is excellent.

TESTING METHODOLOGY

01

Sample Prep

Lyophilized powder dissolved in H2O:ACN (7:3) at 10 mg/mL, diluted 1/10 to 1 mg/mL.

02

HPLC Analysis

5 µL onto C18 column. Gradient 5-95% ACN, 55 min, 0.5 mL/min. UV 280 nm. Peak ~22.3 min.

03

Purity Calc.

≥99% purity by HPLC area percent. Blank confirms background is solvent only.