

CERTIFICATE OF ANALYSIS

MOTS-c Batch OP-MO406S September 2026

Product name	MOTS-c	Molecular formula	$C_{101}H_{152}N_{28}O_{22}S_2$
Batch number	OP-MO406S	Molecular weight	2174.64 g/mol
CAS number	1627580-64-6	Quantity	10 mg
Date of manufacture	September 2026	PubChem CID	146675088
Date of analysis	3 September 2026	Analytical reference	MS10-20260903S8207
Storage	Powder: -20°C 3 years; 4°C 2 years; 15°C 3 months.	Storage	In solvent: -80°C 6 months; -20°C 1 month; 10°C 1 week

Amino acid sequence

H-Met-Arg-Trp-Gln-Glu-Met-Gly-Tyr-Ile-Phe-Tyr-Pro-Arg-Lys-Leu-Arg

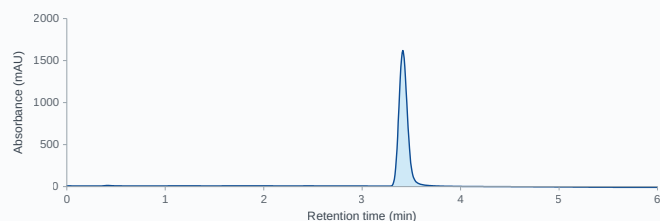
16 residues

Analytical results

Test parameter	Method	Specification	Result	Status
Appearance	Visual	White to off-white powder	Not determined	—
Peptide purity	RP-HPLC (UV 220 nm)	≥ 98.5%	99.86%	✓
Molecular weight confirmation	ESI-MS	2174.64 ± 1.0 Da	Conforms	✓
Water content	Karl Fischer	≤ 10.0%	Not determined	—
Counter-ion content	HPLC	TFA ≤ 0.50% (acetate salt)	Not determined	—
Total related substances	RP-HPLC (UV 220 nm)	≤ 2.0%	0.14%	✓
Largest single impurity	RP-HPLC (UV 220 nm)	≤ 1.0%	0.14%	✓
Residual solvent — Acetonitrile	GC-HS	≤ 410 ppm	Not determined	—
Residual solvent — DCM	GC-HS	≤ 600 ppm	Not determined	—
Residual solvent — DMF	GC-HS	≤ 880 ppm	Not determined	—
Bacterial endotoxins	LAL kinetic turbidimetric	< 5 EU/mg	Not determined	—
Bioburden	USP <61>	< 100 CFU/g	Not determined	—

HPLC chromatogram RP-HPLC UV 220 nm

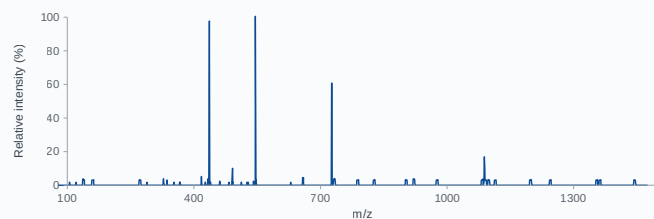
UV detection at 220 nm — LCMS-02AB gradient, 6 min run — as recorded



Main peak RT 3.410 min · Area 99.86% · Largest imp 0.14% · Total related 0.14%

Mass spectrum ESI-MS positive

Electrospray ionisation — positive mode, Frag 110 V

Observed $[M+5H]^+ 435.9$ / $[M+4H]^+ 544.7$ / $[M+3H]^+ 725.7$ · MW 2174.64 g/mol

✓ Overall result: Conforms to specification

Charts are measured data. Both panels are redrawn from the instrument's own chromatogram and mass spectrum in report MS10-20260903S8207 — no curve is modelled or simulated. **Not determined** marks parameters the supplied LC-MS report does not cover; they are not carried over from any previous batch and are not certified here.

Results relate only to the batch tested, by the stated methods at time of release, and are provided in good faith without warranty — OP Labs does not guarantee the accuracy or completeness of the results. Storage figures are recommendations, not stability data. Research use only — not for human or veterinary use.