

MOTS-c

Released 21 Apr 2026

Product name	MOTS-c	Batch number	C-MO32-3.0-20260421
Lot / sample ID	C-MO32-3.0-20260421	CAS number	1627580-64-6
Molecular formula	C ₁₀₁ H ₁₅₂ N ₂₈ O ₂₂ S ₂	Molecular weight	2174.62 g/mol
Presentation	3 mL cartridge (32 mg)	Concentration	10.7 mg/mL
Appearance	Colourless to light-yellow solution	Storage	2-8 C, dark, sealed; do not freeze
Date of analysis	21 Apr 2026	Manufacture date	21 Apr 2026

Peptide identity

Sequence	H-Met-Arg-Trp-Gln-Glu-Met-Gly-Tyr-Ile-Phe-Tyr-Pro-Arg-Lys-Leu-Arg-OH		
Counter-ion	Acetate	Quality standard	Enterprise Standards

Raw material (API) batch - MOTS-c powder

API batch number	260501	Report date	15 May 2026
Manufacture date	11 May 2026	Retest date	10 May 2028
Storage	2-8 C, protect from light		

Analytical results

Test parameter	Method	Specification	Result	Status
Appearance	Visual	Colourless to light-yellow solution	Conforms	Conforms
Appearance (API powder)	Visual	White to off-white powder	White powder	Conforms
Identity	RP-HPLC	RT corresponds to standard	Conforms	Conforms
Purity	RP-HPLC	>= 95.0%	99.8%	Pass
Individual impurity	RP-HPLC	<= 2.0%	0.09%	Pass
Total impurities	RP-HPLC	<= 5.0%	0.22%	Pass
pH	Potentiometric	3.5 - 4.5	3.9	Pass
Phenol content	RP-HPLC	4.5 - 5.5 mg/mL	5.0 mg/mL	Pass
Sterility	Ph. Eur.	Meets requirements	Conforms	Conforms
Bacterial endotoxins (API)	LAL	<= 20 EU/mg	< 20 EU/mg	Pass

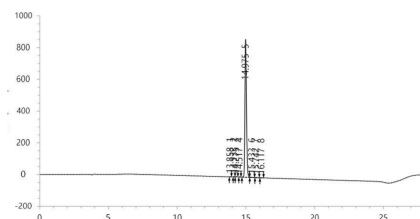
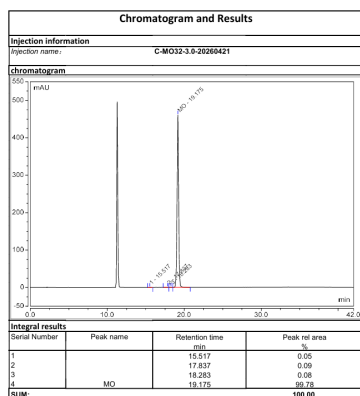
MOTS-c

continued

Analytical results (continued)

Test parameter	Method	Specification	Result	Status
Content	RP-HPLC	≥ 10.1 mg/mL	11.3 mg/mL	Pass
Solubility (API)	Visual	≥ 30 mg/mL in water	Conforms	Conforms
Identity (API)	RP-HPLC	Consistent with reference substance	Conforms	Conforms
Molecular ion mass (API)	LC-MS	2174.62 +/- 1.0	Conforms	Conforms
Water content (API)	Karl Fischer	$\leq 8.0\%$	2.9%	Pass
Purity (API)	RP-HPLC	$\geq 99.0\%$	99.69%	Pass
Peptide content (API)	Calculated (anhydrous)	$\geq 80.0\%$	89.4%	Pass
Total impurities (API)	RP-HPLC	$\leq 1.0\%$	0.31%	Pass
Max single impurity (API)	RP-HPLC	$\leq 0.5\%$	0.17%	Pass
Acetate content (API)	HPLC	$\leq 15.0\%$	7.3%	Pass
Bacterial endotoxins (API)	LAL	< 5 EU/mg	Conforms	Conforms

HPLC chromatogram



Peak Table

Peak#	Ret Time (min)	Peak Area (mAU*s)	Relative Peak Area (%)	Peak Height (mAU)	Relative Peak Height (%)
1	13.888	1.059	0.015	0.212	0.024
2	14.133	0.763	0.011	0.176	0.020
3	14.275	1.774	0.026	0.265	0.030
4	14.517	1.616	0.020	0.183	0.020
5	14.975	6865.216	99.699	868.825	99.816
6	15.433	11.605	0.169	0.353	0.041
7	15.782	2.239	0.048	0.307	0.035
8	16.117	1.617	0.023	0.204	0.023
Total		6885.930	100.000	870.424	100.000

RP-HPLC - cartridge batch (left, RT 19.175 min, 99.78%) and API powder batch 260501 (right, RT 14.975 min, 99.699% at 210 nm) - reproduced from source lab reports

Overall result — Conforms to specification
QC PASS

Results relate only to the batch tested, by the stated methods at time of release. Storage figures are recommendations, not stability data. For research use only - not for human consumption.