

## CERTIFICATE OF ANALYSIS

<b>Product Name:</b>	<b>MOTS-c</b>		
<b>Sequence</b>	<b>Met-Arg-Trp-Gln-Glu-Met-Gly-Tyr-Ile-Phe-Tyr-Pro-Arg-Lys-Leu-Arg</b>		
<b>Batch No.</b>	25070101-01	<b>CAS NO.</b>	1627580-64-6
<b>Molecular Formula</b>	$C_{101}H_{152}N_{28}O_{22}S_2$	<b>Quantity</b>	270.2g
<b>Mfgr. Date</b>	August 3, 2025	<b>Retest Date</b>	August 2, 2027
<b>Analytical results</b>			
<b>Items</b>	<b>Specifications</b>		<b>Results</b>
<b>Appearance</b>	White or off-white powder		White powder
<b>Solubility</b>	Soluble in water (No less than 10mg/ml)		Conforms
<b>HPLC</b>	The principal peak in the chromatogram obtained with the test solution is similar in retention time to principal peak in the chromatogram obtained with the reference solution.		Conforms
<b>Amino acid content</b>	Tyr 1.8-2.2		2.0
	Gly 0.9-1.1		1.0
	Ile 0.9-1.1		1.0
	Met 1.8-2.2		2.1
	Lys 0.9-1.1		1.0
	Phe 0.9-1.1		1.0
	Arg 2.7-3.3		2.9
	Pro 0.9-1.1		1.0
	Leu 0.9-1.1		1.0
	Glu 1.8-2.2		1.0

<b>Mass spectrum</b>	2174.6±1.0	2174.2
<b>Related Substances(HPLC)</b>	Any individual impurity: NMT 1.0%	0.21%
	Total impurities: NMT 2.0%	0.81%
<b>Purity (HPLC)</b>	NLT 98.0%	99.2%
<b>pH</b>	4.0 ~ 6.0	5.5
<b>Acetic acid</b>	NMT 13.0%	7.5%
<b>Trifluoroacetate</b>	NMT 0.5%	N.D
<b>Water content (KF)</b>	NMT 8.0%	5.8%
<b>Peptide Content</b>	NLT 80.0%	86.0%
<b>Residual solvent (GC)</b>	Methanol NMT 3000ppm	88ppm
	Methylene chloride NMT 600ppm	N.D
	Acetonitrile NMT 410ppm	N.D
	Methyl tert-butyl ether NMT 5000 ppm	N.D
	DMF NMT 880ppm	N.D
<b>Bacterial endotoxins</b>	Less than 10EU/mg	Conforms
<b>Microbial limits</b>	TAMC NMT 100cfu/g	Conforms
	TYMC NMT 100cfu/g	Conforms
<b>Storage</b>	In an air tight container, protected from light; Short Term: 2-8°C ; Long Term: below -10°C.	
<b>Conclusion</b>	This batch of product complies with Enterprise Standard.	

Inspector: Carlifor Wu

Verifier: Jack He