



worldwidepeptidedistribution@gmail.com
Certificate of Analysis

Product Name	Semax	CAS No.	80714-61-0
Molecular Formula	C ₃₇ H ₅₁ N ₉ O ₁₀ S	Molecular Weight	813.92
Structural formula			
Batch No.	XA-260107	Quantity	1547.25g
Mfgr. Date	2026-01-07	Retest Date	2028-01-06
Tests	Acceptance Criteria	Results	
Appearance	White	White	
Solubility	Can be dissolved to 5mg/ml in pure water	Conforms	
Molecular Ion Mass	4813.53 ± 1	Conforms	
Amino Acid Analysis	Ser: 4.0 to 6.0 Gly: 3.2 to 4.8 Asp: 1.6 to 2.4 Glu: 3.2 to 4.8 Thr: 1.6 to 2.4 Ala: 3.2 to 4.8 Pro: 3.2 to 4.8 Lys: 1.6 to 2.4 Tyr: 1.6 to 2.4 Ile: 2.4 to 3.6 Leu: 1.6 to 2.4 Phe: 1.6 to 2.4 Val: 0.8 to 1.2	Ser: 4.0 Gly: 3.6 Asp: 2.2 Glu: 3.6 Thr: 2.0 Ala: 4.2 Pro: 4.0 Lys: 1.8 Tyr: 2.4 Ile: 2.6 Leu: 2.0 Phe: 2.2 Val: 1.0	
pH	7.0~9.0(C=5mg/ml)	7.2	
Water Content (K.F)	NMT 8.0%	2.3%	
Purity (HPLC)	NLT 98.0%	99.52%	
Related substances (HPLC)	The largest individual impurity test NMT 1.0%	0.13%	
	The total impurities test NMT 2.0%	0.26%	
Residual solvent (GC)	Methylene chloride	NMT 600ppm	N.D
	Acetonitrile	NMT 410ppm	216ppm
	Methanol	NMT 3000ppm	N.D
	NN-Dimethylformamide	NMT 880ppm	N.D
	Isopropyl ether	NMT 5000ppm	N.D
Acid group ions (HPLC)	TFA	NMT 0.1%	N.D

	PO ₄ ³⁻	NMT 0.1%	N.D
	Cl ⁻	NMT 0.1%	N.D
	HAC	NMT 0.1%	N.D
Bacterial Endotoxins	NMT 10 EU/mg		Conforms
Microbial Limits	TAMC	NMT 1000 cfu/g	Conforms
	TYMC	NMT 100 cfu/g	Conforms
	Escherichia Coil presence	Negative	Conforms
	Salmonella	Negative	Conforms
	P.Aeruginosa	Negative	Conforms
	S.Aureus	Negative	Conforms
Sodium ion	NMT 5.0%		1.4%
High Molecular Protein	NMT 0.50%		ND
Assay (HPLC)	95.0~105.0%(on anhydrous and salt-free substance basis)		99.9%
Peptide Content (Mass Balance)	NLT 80.0%		96.08%
Conclusion: conformed with the product standards.			



Storage Conditions: Keep in tight container, protect from light, store at a temperature of -20 ± 5°C.