

CERTIFICATE OF ANALYSIS

Product Name:	Thymosin beta 4		
Sequence	Ac-Ser-Asp-Lys-Pro-Asp-Met-Ala-Glu-Ile-Glu-Lys-Phe-Asp-Lys-Ser-Lys-Leu-Lys-Lys-Thr-Glu-Thr-Gln-Glu-Lys-Asn-Pro-Leu-Pro-Ser-Lys-Glu-Thr-Ile-Glu-Gln-Glu-Lys-Gln-Ala-Gly-Glu-Ser-OH		
CAS No.	77591-33-4	Batch No.	TK231221
Molecular Formula	C212H350N56O78S	Date of Mfg	December 22, 2023
Test Standard	Enterprise Standard	Date of Exp	December 21, 2025
Storage	Keep in dark and cool dry place, 2 to 8°C		
Analytical results			
Items	Specifications		Results
Appearance	White or almost white fluffy powder		Conform
Mass Spectrum	4963.44±1		Conform
Solubility	Soluble in water		Conform
Purity (HPLC)	≥98.0%		99.38%
Related Substance	Total Impurities≤2.0%		0.62%
	Largest Single Impurity≤1.0%		0.37%
Acetic Acid	≤10.0%		1.16%
Water	≤8.0%		4.43%
Residual Solvent	Acetonitrile≤410ppm		Conform
	Dichloromethane≤600ppm		Conform
	N,N-Dimethylformamide ≤880ppm		Conform
Bacterial Endotoxins	≤10EU/mg		<10EU/mg
Conclusion	This product conforms to enterprise standard.		

Inspector: Carlifor Wu

Verifier: Jack He

