

Certificate of Analysis

Product	Thymosin β 4 (TB-500)	CAS No.:	77591-33-4
Product No.:	BT	Molecular Formula	C ₂₁₂ H ₃₅₀ N ₃₆ O ₇₈ S
Sequence	Ac-SDKPDMAIEIEKFDKSKLKKKTETQEKNPSPKETIEQEKQAGES <i>N-terminally acetylated 43-aa peptide (Thymosin β4 acetate; marketed as TB-500)</i>		
Molecular Weight	4963.44	Quantity	500.0g
Batch No.	BT-2602B	Storage Temp.	-20 $\pm$ 5°C
Mfg. Date	Jan.27 th , 2025	Re-test Date	Jan.27 th , 2027

【ITEMS】		【SPECIFICATIONS】	【RESULTS】
Appearance		White or almost white powder	White fluffy powder
Solubility		Soluble in water	Conforms
Solution clarity and color		Clear and colorless liquid	Conforms
Identification	HPLC	The retention time of the principal peak of the test solution corresponds to that of the reference solution, as obtained in the Assay.	Conforms
	Mass spectrum	4963.4±2.0	4964.1
Amino acid content		Asp: 3.6~4.4	4.0
		Thr: 2.7~3.3	2.9
		Ser: 3.6~4.4	3.8
		Glu: 10.0~12.0	11.0
		Pro: 2.7~3.3	3.0
		Gly: 0.9~1.1	1.0
		Ala: 1.8~2.2	2.0
		Met: 0.9~1.1	1.0
		Ile: 1.8~2.2	2.0
		Leu: 1.8~2.2	2.0
		Phe: 0.9~1.1	1.0
		Lys: 8.1~9.9	9.0
Related substances (HPLC)		Largest single impurity: NMT 1.0%	0.14%
		Total impurities: NMT 2.0%	1.23%
Purity (HPLC)		NLT 99.0%	99.66%
pH		4.0~7.0	4.9
Acid group ions		Trifluoroacetate ion (TFA residue): NMT 1.0%	N.D
		Acetate ion (acetic acid, counter-ion): NMT 15.0%	6.3%
Water content (KF)		NMT 8.0%	3.0%
Peptide content		NLT 80.0%	82.8%
Residual solvent		Acetonitrile NMT 410ppm	253ppm
		Methanol NMT 3000ppm	N.D
		Methyl tert-butyl ether NMT 5000ppm	N.D
Bacterial endotoxins		NMT 10EU/mg	1.2EU/mg
Microbial Limits		Total aerobic bacteria ≤100cfu/g	Conforms
		Mould & Yeast ≤10cfu/g	Conforms
		Bile tolerant enterobacteria: absence in 1g	absent
		Pseudomonas aeruginosa: absence in 1g	absent
		Staphylococcus aureus: absence in 1g	absent
Assay		95.0%~105.0% (Calculated on anhydrous, acetate-free basis)	98.3%
Storage		Keep in light container, protect from light, store at a temperature of -20±5°C.	
Report		QC01	Date: Jun. 28 th , 2026
Reviewer			Date: Jun. 28 th , 2026
Conclusion: This batch of product complies with Enterprise Standard.			

合格

It is only supplied as chemical product.
It is only for R&D use.