

Certificate of Analysis

Product	TB-500	CAS No.:	77591-33-4
Product No.:	TB500	Molecular Formula	C ₂₂₅ H ₃₅₉ N ₆₁ O ₆₈ S
Sequence	Thr-Lys-Thr-Glu-Ser-Lys-Tyr-Gly-Pro-Pro-Pro-Gln-Lys (Acetate salt)		
Batch No.	TB500-260601	Quantity	2.0kg
Mfg. Date	May 26th, 2026	Retest Date	May 25th, 2028

【 ITEMS 】	【 SPECIFICATIONS 】	【 RESULTS 】
Appearance	White or almost white lyophilized powder	White lyophilized powder
Solubility	Freely soluble in water	Conforms
Solution clarity and color	Clear and colorless	Conforms
Specific optical rotation [α] _D ²⁰	-20.0° to -40.0° (anhydrous and sodium ion-free substance)	-27.3°
Identification by 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	1524.8±1.0	1524.7
pH	6.5~8.5	7.1
Water content(KF)	NMT 8.0%	3.8%
Acid group ions	Trifluoroacetate ion NMT 0.5% Acetate ion NMT 0.5%	N.D N.D
Related substances(HPLC)	Any individual impurity: NMT 0.5% Total impurities: NMT 2.0%	0.14% 0.62%
Purity(HPLC)	NLT 98.0%	99.38%
Sodium ion	1.0~2.0%	1.2%
High molecular protein	NMT 0.5%	N.D
Amino acid content	Thr: 2.0~3.0	2.3
	Lys: 2.0~3.0	2.2
	Glu: 2.0~3.0	2.1
	Ser: 1.0~2.0	1.4
	Tyr: 1.0~2.0	1.5
	Gly: 1.0~2.0	1.2
	Pro: 3.0~4.0	3.6
	Gln: 1.0~2.0	1.3
	AEEA: Should be detected	Conforms



Residual solvent	Methylene chloride NMT 600ppm Acetonitrile NMT 410ppm Methyl tert-butyl ether NMT 5000 ppm DMF NMT 880ppm	N.D 46ppm N.D N.D
Peptide content	NLT 90.0%	92.1%
Bacterial endotoxins	NMT 10EU/mg	<3EU/mg
Microbial limits	TAMC NMT 100 cfu/g	<20 cfu/g
	TYMC NMT 100 cfu/g	<20 cfu/g
	E. Coli: Absent	Absent
Assay(C ₂₂₅ H ₃₅₉ N ₆₁ O ₆₈ S)	95.0%~105.0%(Calculated with reference to the anhydrous and sodium ion-free substance.)	99.3%
Storage	Keep in tight container, protect from light, store at a temperature of -20±5°C.	
Report	Li peng	Date 2026.06.03
Reviewer	Fang Hui Liao	Date 2026.06.03
Conclusion: This batch of product complies with Enterprise Standard.		



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

Testing Organization:
Shanghai High Purity Peptide Biotechnology Co., Ltd.
上海高纯肽生物科技有限公司