

## **Certificate of Analysis Thymosin Alpha 1 Acetate**

CAS No	62304-98-7	Code	BIOJTHA001
Lot No	2025073001	Manufacture Date	Aug.11, 2025
Retest Date	Aug.10, 2027	Quantity	5G

<b>Testing Items</b>	Specifications	Results	
Appearance	White or almost white powder or loose mass	White powder	
Solubility	Dissolved in TFA, slightly dissolved in water, insoluble in acetonitrile and ether	Complies	
Specific rotation[a] <sub>D</sub> <sup>20</sup>	$-100.0^{\circ} \sim -110.0^{\circ} \text{ (c=5, 0.02mol/L Phosphate)}$	-108.2°	
Clarity & color of solution	The solution should be clear and colorless. If the turbidity is obvious, it shall not be thicker than the standard solution of turbidity NO.1	Clear and colorless	
Water content (Karl Fischer)	≤5.0%	3.7%	
Acetic Acid (By HPLC)	≤5.0%	4.0%	
Trifluoroacetic acid (By HPLC)	≤0.5%	Not detected	
	Asp: 3.4~4.6	4.2	
	Glu: 5.4~6.6	5.8	
	Ser: 2.4~3.6	3.0	
	Thr: 2.4~3.6	2.8	
Amino acid profile	Ala: 2.7~3.3	3.1	
	Val: 2.4~3.6	2.6	
	Leu: 0.8~1.2	1.1	
	Ile: 0.8~1.2	1.0	
	Lys: 3.4~4.6	4.3	
Peptide Purity (By HPLC)	≥98.0%	99.5%	
Assay	95.0%~105.0%	99.7%	
Related Substance	Largest single impurity≤1.0%	0.1%	
(By HPLC)	Total impurities ≤2.0%	0.5%	
Microbiology	Aerobe≤1000 cfu/g	Complies	
	Mould & Yeast≤100 cfu/g	Complies	
Bacterial endotoxin	≤10EU/mg	<10EU/mg	
Molecular Weight		3108.28	
Conclusion	This product conforms to Ch.P standard		

\*Storage: Store at -20 $\pm$ 5°C, Protect from moisture and light.

