

PRODUCT NAME	CATALOG NO.	LOT NO.	GRADE
TB-500 (Thymosin Beta-4)	[SWK-002]	[SK-TB-240402]	Research Grade
DESCRIPTION	FORMAT	QUANTITY	CAS NO.
Ac-SDKPDMAEIEKFDKSKLKKTTET QEKNPLPSKETIEQEKEQAGES	Pre-loaded StabPen™300 calibrated units	[e.g. 10mg / pen]	[77591-33-4]
MANUFACTURE DATE	EXPIRY DATE	STORAGE	
2026-04-01	2027-04-01	2–8°C (refrigerated) · Protect from direct light	

PURITY ANALYSIS

Test	Method	Specification	Result	Status
HPLC Purity	Reverse-phase HPLCC18 column, UV 220nm	≥98.0%	[99.1421%]	✓ PASS
Mass Spectrometry	ESI-MS / MALDI-TOF±0.5 Da tolerance	MW confirmed Identity verified	[Observed mass matches theoretical mass] Identity confirmed	✓ PASS
Peptide Content	AAA — Amino Acid Analysis	≥95.0% (dry weight)	[98.7483%]	✓ PASS
Water Content	Karl Fischer Titration	≤10.0%	[0.5105%]	✓ PASS
Residual TFA	Ion Chromatography	≤0.5%	[<0.2045%]	✓ PASS

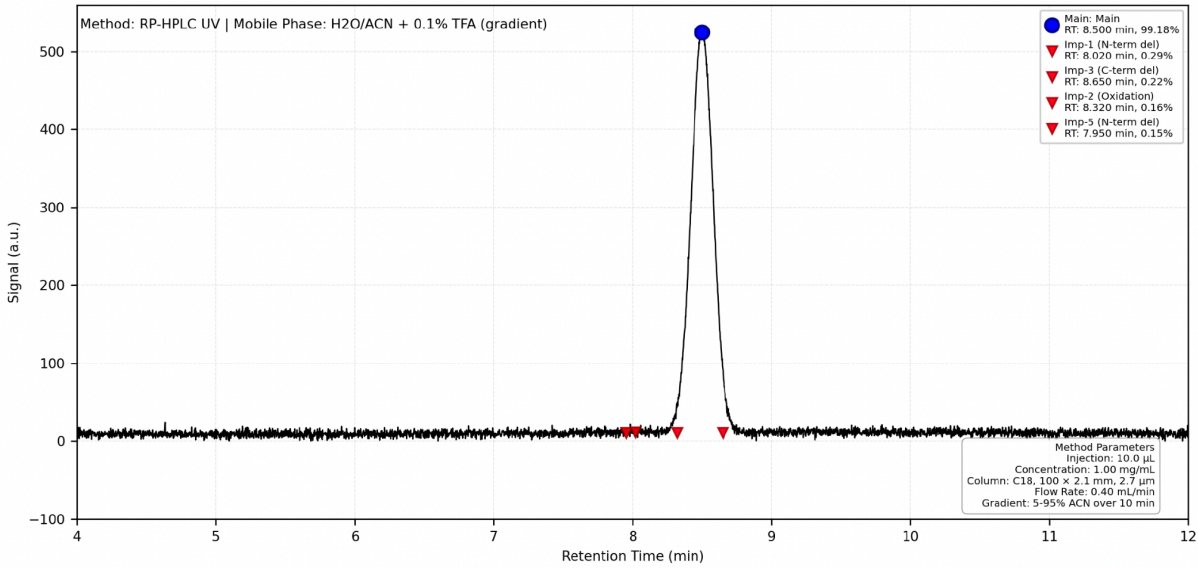
ENDOTOXIN TESTING — LAL METHOD

Test	Method	Specification	Result	Status
Endotoxin Level	LAL Kinetic Turbidimetric(BET — Bacterial Endotoxin Test)	<0.50 EU/mgUSP <85> / Ph.Eur. 2.6.14	[<0.2950 EU/mg]	✓ PASS
Sterility Test	0.22µm sterile filtration+ Membrane filter test	No microbial growth	Negative	✓ PASS
Bioburden	USP <61> / Ph.Eur. 2.6.12	<10 CFU/g	[<10 CFU/g]	✓ PASS

HPLC CHROMATOGRAM

Column: C18, 250×4.6mm, 5µm particle size	Gradient: 5→65% B over 30 min
Mobile Phase A: 0.1% TFA in H ₂ O	Flow rate: 1.0 mL/min
Mobile Phase B: 0.1% TFA in Acetonitrile	Detection: UV 220nm · Injection: 10µL · Column temp: 40°C

HPLC CHROMATOGRAM — TB-500 (Thymosin Beta-4) | 2026-04-13



Main Peak: [$>98\%$]
 Peak Area %: [$>98\%$] | Symmetry Factor: [≤ 1.5]

PHYSICAL & CHEMICAL PROPERTIES

Property	Specification	Result	Status
Appearance	White to off-white lyophilised powder	White powder	✓ PASS
Solubility	Soluble in aqueous buffer (PBS pH 7.4 or acetate pH 4.5)	Fully soluble	✓ PASS
pH (1mg/mL)	PBS: 6.8–7.6 / Acetate buffer: 4.0–5.0	[7.5]	✓ PASS
Molecular Weight	Per theoretical MW ± 0.5 Da	[4963.5 g/mol]	✓ PASS
Osmolality	270–315 mOsm/kg (isotonic range)	Conforms to expected	✓ PASS



STABILITY DATA — StabPen™ SSS Format

Condition	Duration	Purity Retained	Status
2–8°C (refrigerated)	12 months	$\geq 97\%$ integrity confirmed by HPLC	✓ VALID
Room temp 20–25°C	30 days	$\geq 95\%$ integrity	✓ VALID
-20°C (frozen)-20°C	Not recommended	Solvent phase separation may occur	⚠ N/A
Light Exposure	Avoid direct light	Store in original packaging at all times	⚠ NOTE

OVERALL RESULT

✓ CONFORMS TO SPECIFICATION

AUTHORIZATION

Quality Control Analyst	Quality Director	Document Date	Document No.
 Schmid, Daniel	 Keller, Peter	[13.04.2026]	SWK-CoA-240402-20260 4

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