CRAFA
PEPTIDE & COMPOUND ANALYSIS

Independent Peptide & Research-Compound Testing
14 Mill Lane, Cambridge, United Kingdom

CERTIFICATE OF ANALYSIS

Certificate of Analysis (COA)

No. CRF-2026-2079
Issued: 2026-10-16

PRODUCT IDENTIFICATION

PRODUCT
Thymosin Alpha-1 10 mg

SKU / INTERNAL CODE
CRF-2026-2079

PRESENTATION
Lyophilised powder, 10 mg vial

BATCH NUMBER
LOT-2610-2079

CLIENT
veltispeptides.mx

SAMPLE RECEIVED
2026-10-11

ANALYSIS DATE
2026-10-14

PRODUCTION DATE
2026-10-09

ISSUED
2026-10-16

EXPIRY / RETEST
2028-10-16

MOLECULAR FORMULA
C129H215N33O55

MOLECULAR WEIGHT
3108.3

CAS NUMBER
62304-98-7

ANALYTICAL METHOD

PANEL
SILVER - HPLC-UV + LC-MS/MS + ICP-MS (Pb/As/Cd/Hg) + LAL endotoxin

METHOD
RP-HPLC-UV 214 nm · LC-MS/MS ESI Q-TOF · ICP-MS · LAL kinetic chromogenic (USP <85>)

INSTRUMENT
Waters Xevo G3 · Agilent 7900 ICP-MS · Charles River Endosafe nexgen-PTS

Column: C4 2.1×100mm | Temperature: 60°C | Mobile phase: 0.1% TFA H2O / ACN | Flow: 0.3 mL/min | Retention time: 10.5 min

1. PURITY & ASSAY - RP-HPLC-UV (214 nm)

Test	Specification	Result	Status
HPLC Purity	≥98.0%	99.7%	PASS
Quantity	95.0-105.0%	10.0 mg (100.0%)	PASS

2. LC-MS/MS STRUCTURAL CONFIRMATION

Test	Reported data	Status
Theoretical [M+H]+	3108.3	Observed: 3108.6	Δ +0.30 Da	PASS
Sequence Coverage (MS/MS)	≥95%	100% (28 aa)	PASS
Key fragments	b9 1024.5 · b18 2013.0 · y12 1387.7 · y22 2494.2	PASS
Modifications	N-terminal acetyl confirmed (+42.01 Da on b1); C-terminal Asn free acid; Met sulfoxide <0.4%	PASS

3. HEAVY METALS - ICP-MS (USP <232>/<233>)

Test	Specification	Result	Status
Pb	≤5.0 µg/g	<0.05 µg/g	PASS
As	≤15.0 µg/g	<0.10 µg/g	PASS
Cd	≤2.0 µg/g	<0.02 µg/g	PASS
Hg	≤3.0 µg/g	<0.01 µg/g	PASS

4. ENDOTOXIN - LAL kinetic chromogenic (USP <85>)

Test	Reported data	Status
Result	<1.0 EU/mg limit | 0.10 EU/mg | PPC recovery 96%	PASS

FINAL BATCH RESULT

PASS - Conforms to specifications

ANALYST NOTES

Synthetic thymosin α1, 28 aa. No host-cell protein (synthetic route). Endotoxin exceptionally low.

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