

CERTIFICATE OF ANALYSIS

Thymosin alpha-1 - 5 mg

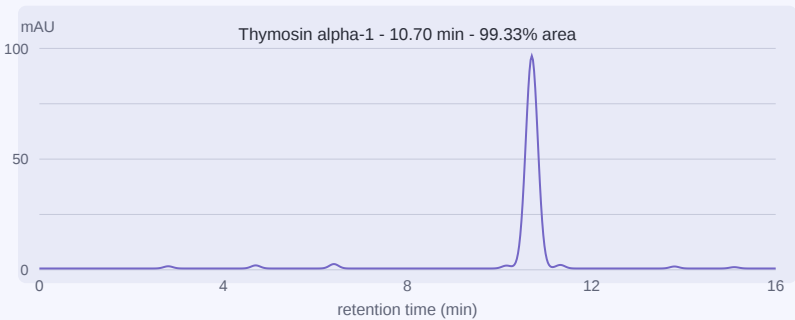
N-acetylated 28-residue peptide - reference-standard identity

Material	Thymosin alpha-1	Client	novumpeptides.com	Received	2026-08-24 at 2-8 C
Batch / lot	PEP-44-UWE	Label claim	5 mg	Analysed	2026-08-25 to 2026-08-26

TEST RESULTS

ATTRIBUTE	RESULT	SPECIFICATION	METHOD	VERDICT
Identity	Conforms	Matches reference	MA-MS-014 / LC-HRMS	Conforms
Purity (area %)	99.33%	>= 99.00%	MA-UHPLC-031 / UV 214	Pass
Largest single impurity	0.19%	<= 0.50%	MA-UHPLC-031 / UV 214	Pass
Total related substances	0.67%	<= 1.00%	MA-UHPLC-031 / UV 214	Pass
Thymosin alpha-1 per vial	5.00 mg	4.50-5.50 mg	MA-ASSAY-011 / UHPLC-UV	Pass
Water content	3.87%	<= 8.00%	MA-KF-004 / Karl Fischer	Pass
Residual acetonitrile	158 ppm	<= 410 ppm	MA-GC-006 / HS-GC-FID	Pass
Residual TFA	0.14%	<= 1.00%	MA-IC-003 / ion chromatography	Pass

RP-UHPLC processed trace, UV detection



Record 6E6ZUWE-PEP-01; duplicate independent preparations. System suitability met retention-time and resolution criteria; blank response was below threshold.

Related species > 0.05%

deletion sequence	0.19%
insertion sequence	0.15%
diastereomeric variant	0.11%
N-terminal variant	0.08%
C-terminal variant	0.06%
unresolved peaks	0.08%

Related species were assigned by orthogonal reference comparison and mass-spectrometric or chromatographic evidence. Mean area percentages; reporting threshold 0.05%.

Conclusion

Identity and quality attributes met the stated criteria. Mean Thymosin alpha-1 content was 5.00 mg/vial and chromatographic purity was 99.33%.

Identity was established by LC-HRMS against a qualified reference; content and related substances were assessed independently.

Analytical review

Ines Abadi I. Abadi

Quality review

Marcus Oyelaran

Approval date: 2026-08-27 M. Oyelaran

Decision rule: guarded acceptance; reported outcomes account for method uncertainty and remain within the stated project specifications.