Meridian Assay

Independent analytical testing - Cambridge MA

TASK NO.
6E6ZUWE
Report MA-TA1-0044 - Rev. 01

CERTIFICATE OF ANALYSIS

Thymosin alpha-1 - 5 mg

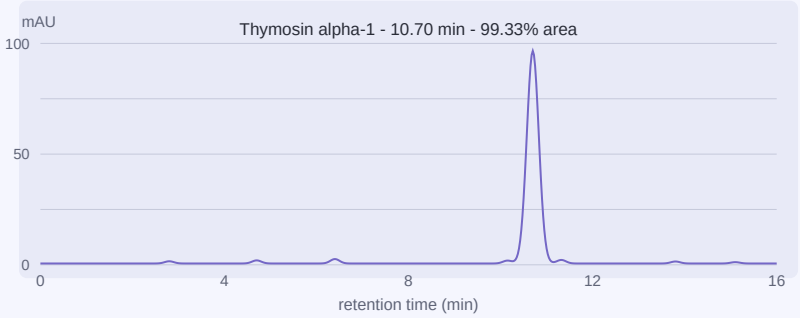
N-acetylated 28-residue peptide - reference-standard identity

Material	Thymosin alpha-1	Client	novumpeptides.com	Received	2026-08-24 at 2-8 C
Batch / lot	TA1-44-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.