Certificate of Analysis

ILS Laboratories
8222 Vickers St, Suite 106, San Diego, CA 92111
(619) 329-3999 | ils-lab.com

Thymosin Alpha-1 - 10mg

Tested for: px1 research
PX1RESEARCH.COM

PASS

COA #:	**COA-2026-CZQOMG**	Analysis Date:	**07/31/2026**
Lot Number:	**PX1TA110-0021**	Appearance:	**Good**
Accession #:	**ACC-2026-13170**	Sample Matrix:	**Lyophilized**
Labeled Content:	**10mg**	Volume:	**3mL**
		Date Received:	**07/29/2026**

Scan to verify authenticity at ils-lab.com
Access Code: NWDVDE65

Method: **Full QC Panel**

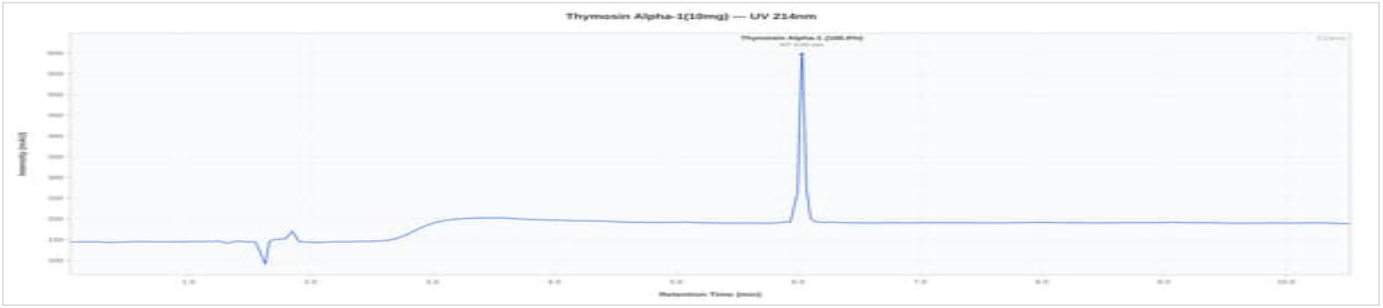
Identity	Peptide Purity	
Thymosin Alpha-1	**99.53%**	**Fentanyl Free**

Thymosin Alpha-1 10mg - PX1TA110-0021

Full QC Panel

Analyte	Specification	Result	Unit	Status
Peptide Purity (HPLC)	>= 95.0%	**99.53%**	%	**PASS**
Net Peptide Content	Report Only	**10.27**	mg	N/A
Identity (HPLC-RTM)	Thymosin Alpha-1	**Confirmed**	-	**PASS**
Fentanyl Screen	Immunoassay, 50 ng/mL cutoff	**Not Detected**	-	**PASS**

HPLC Chromatogram



Thymosin Alpha-1 10mg - PX1TA110-0021: UV Chromatogram

Heavy Metals Analysis (ICP-MS)

Test	Specification	Result	Status
Arsenic (As)	NMT 1.5 ppm	0.1442	**PASS**
Cadmium (Cd)	NMT 0.5 ppm	0.0638	**PASS**
Lead (Pb)	NMT 1.0 ppm	*Not Detected*	**PASS**
Mercury (Hg)	NMT 1.5 ppm	0.208	**PASS**
Chromium (Cr)	NMT 10.0 ppm	1.924	**PASS**

Dr. Greg Kalyuzhny
Lab Director
7/31/2026

COA #: **COA-2026-CZQOMG**
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Verify: portal.ils-lab.com/verify/BHzcvLrWG7qGShu0
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Sterility Testing (PCR)

Test	Specification	Result	Status
Sterility (PCR)	No Growth	**No Growth**	**PASS**

Endotoxin Testing (USP <85>)

Test	Specification	Result	Status
Endotoxin (USP <85>)	NMT 0.05 EU/mL	**NMT 0.05 EU/mL**	**FAIL**
Acceptance criteria: NMT 0.05 EU/mL per client specification.			

Notes & Methodology

1. Date Tested: 07/31/2026. Methods: Full QC Panel.
2. The sample was confirmed to be Thymosin Alpha-1 by HPLC. Identification by chromatographic retention time comparison with a reference standard.
3. Elemental impurities analyzed by ICP-MS per USP <233> methodology. Acceptance criteria are internal laboratory quality screening limits for research-use materials and do not represent evaluation against any specific pharmacopeial monograph or product specification.
4. Endotoxin tested per USP <85> kinetic turbidimetric method. Acceptance criteria per client specification.
5. Peptide purity determined by RP-HPLC area normalization at 214 nm. Value represents the percentage of the target peptide relative to all peptide-related peaks. Non-peptide process-related impurities, if detected, are excluded from the calculation.

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