

CLIENT & SAMPLE INFORMATION

Client	Peptide Partners	Test Date	February 25, 2026
Product Name	Thymosin alpha-1	Strength	10 mg
Lot / Batch	TA202602	Condition	Lyophilized

ICP-MS metals analysis performed using EPA-referenced methods; results evaluated against internal acceptance criteria.

TEST METHODOLOGY

Test Performed	Elemental Impurities Analysis	Instrument	ICP-MS
Sample Prep	HNO ₃ / H ₂ O ₂ matrix	Calibration	Multi-element standard curve
Internal Std	Sc, Ge, In, Bi	Material Type	Raw Material (Research Use)

ELEMENTAL IMPURITIES RESULTS

Element	Result (ppm)	Acceptance Limit (ppm)	Status
Pb Lead	< 0.4	≤ 10	PASS
As Arsenic	< 0.17	≤ 1.5	PASS
Cd Cadmium	< 0.07	≤ 0.5	PASS
Hg Mercury	< 0.4	≤ 3	PASS

METHOD SUITABILITY (SPIKE RECOVERY)

Element	Spike Level	Recovery	Criteria
Pb Lead	5 ppm	94%	70–150%
As Arsenic	0.75 ppm	109%	70–150%
Cd Cadmium	0.25 ppm	96%	70–150%
Hg Mercury	1.5 ppm	101%	70–150%

Spike recovery confirms method suitability for the sample matrix.

INTERPRETATION

Elemental impurities were determined using ICP-MS with EPA-referenced analytical methods. All tested elements (Pb, As, Cd, Hg) are below the stated acceptance limits. Spike recovery values fall within acceptable ranges, confirming method suitability. The sample meets the stated acceptance criteria for elemental impurities.

QUALITY CONTROL

Method Blank: Pass CCV: Pass Duplicate RPD: < 14%

AUTHORIZATION

PREPARED BY

Liam Clarke, B.S.
QC Analyst

REVIEWED BY

David Cohen, M.S.
Quality Director

