

Customer:
OROS Research

EA Sample ID: 26EA0616-049
Sample Name: Thymosin Alpha-1 5mg
Sample Type: Powder
Batch/Lot: OR-LPTA5-626-B2

Date Received:
06/17/2026
Date Completed:
06/23/2026



ETHOS
ANALYTICS

CERTIFICATE OF ANALYSIS

Summary of Results

Analysis Type	Method	Date Tested	Status
Peptides	HPLC	06/23/2026	Complete
Bacterial Endotoxins	USP <85>	06/23/2026	Complete
Residual Solvents	USP <467>	06/23/2026	Complete
Heavy Metals	ICP-MS	06/21/2026	Pass
Microbiological	Petrifilm/qPCR	06/22/2026	Pass



Serving Size: N/A

Peptide Analysis

Analyte	Result	Specification	LOD
Thymosin Alpha-1	5.14mg/vial	5mg/vial	0.1%
Identity of the analyte was confirmed by retention time concordance with a certified reference standard, per USP <621>.			
Chromatographic Purity	>99%	>99%	0.1%
Bacterial Endotoxins (Gel-Clot: 1:10 Dilution)	<1.25 EU/ml	<5 EU/ml	$\lambda =$ 0.125 EU/mL
Acetonitrile	<LOD	<410ppm	300ppm
Methanol	<LOD	<3000ppm	500ppm
DMF (N,N-Dimethylformamide)	<LOD	<880ppm	300ppm
Dichloromethane (Methylene Chloride)	<LOD	<600ppm	300ppm
Diethyl Ether (Ethyl Ether)	<LOD	<5000ppm	500ppm
Isopropanol (2-Propanol)	<LOD	<5000ppm	500ppm
Ethanol	<LOD	<5000ppm	500ppm
THF (Tetrahydrofuran)	<LOD	<720ppm	300ppm
TFA (Trifluoroacetic acid)	<LOD	Report Only	500ppm

NOTES: Injectable peptides may include acceptable salts, sugars, or buffering agents added to improve solubility and stability. These excipients are non-chromophoric, typically not detected by HPLC, and are not considered impurities. Two vials were tested for variability, and the average result is reported above.

LOD = LIMIT OF DETECTION; LOQ = LIMIT OF QUANTIFICATION



Ethos Analytics Laboratory
3020 E Camelback Rd STE 397
Phoenix, AZ 85016
Info@Ethosanalytics.io
www.Ethosanalytics.io
Lic #: 000026LRCND60176649
ISO/IEC 17025 Acc #: 117798

Noel Samsum
Laboratory Director
23-Jun-2026

The sample analyzed was inspected and is free from visual mold, mildew, and foreign matter. The testing procedures, equipment calibration, and maintenance are all in accordance with ISO/IEC 17025:2017 standards. The presented report is only applicable to the sample specified above and may not be applied to any similar or identical products. Reports are prohibited from being reproduced with alterations of any kind.

Customer:
OROS Research

EA Sample ID: 26EA0616-049
Sample Name: Thymosin Alpha-1 5mg
Sample Type: Powder
Batch/Lot: OR-LPTA5-626-B2

Date Received:
06/17/2026
Date Completed:
06/23/2026



ETHOS
ANALYTICS

CERTIFICATE OF ANALYSIS

Heavy Metal Analysis (USP <233>)

<u>Analyte</u>	<u>Result</u> (mcg/vial)	<u>LOQ (ppm)</u>	<u>LOD (ppm)</u>	<u>Limit</u> (mcg/day)	<u>Pass/Fail</u>
Arsenic	0.001	0.010	0.005	0.5	Pass
Cadmium	<LOQ	0.010	0.005	0.1	Pass
Lead	0.015	0.010	0.005	0.5	Pass
Mercury	<LOQ	0.010	0.005	0.1	Pass

Microbiological Analysis (USP <61>, USP <62>)

<u>Microbe</u>	<u>Result</u>	<u>Limit</u>	<u>Pass/Fail</u>
Total Aerobic Plate	<10 CFU/g	<100 CFU/g	Pass
Coliform	<10 CFU/g	<10 CFU/g	Pass
Bile-Tolerant Gram-Negative Bacteria	<10 CFU/g	<10 CFU/g	Pass
Yeast and Mold	<10 CFU/g	<10 CFU/g	Pass
Escherichia Coli	Negative/1g	Negative/1g	Pass
Salmonella	Negative/1g	Negative/1g	Pass
Staphylococcus Aureus	Negative/1g	Negative/1g	Pass

NOTES:

CFU = Colony Forming Unit
NS = Not Specified
NT = Not Tested

LOQ = Limit of Quantification
LOD = Limit of Detection



Ethos Analytics Laboratory
3020 E Camelback Rd STE 397
Phoenix, AZ 85016
Info@Ethosanalytics.io
www.Ethosanalytics.io
Lic #: 000026LRCND60176649
ISO/IEC 17025 Acc #: 117798

Noel Samsum
Laboratory Director
23-Jun-2026

The sample analyzed was inspected and is free from visual mold, mildew, and foreign matter. The testing procedures, equipment calibration, and maintenance are all in accordance with ISO/IEC 17025:2017 standards. The presented report is only applicable to the sample specified above and may not be applied to any similar or identical products. Reports are prohibited from being reproduced with alterations of any kind.