Customer:
Modified Aminos

EA Sample ID: 26EA0911-028
Sample Name: Thymosin Alpha-1
Sample Type: Powder
Batch/Lot: MA-THYM-101

Date Received:
09/11/2026
Date Completed:
09/16/2026

ETHOS ANALYTICS

CERTIFICATE OF ANALYSIS

Summary of Results

Analysis Type	Method	Date Tested	Status
Thymosin Alpha-1	HPLC	09/16/2026	Complete
Bacterial Endotoxins	USP <85>	09/16/2026	Complete
Fentanyl	USP <2251>	09/16/2026	Complete
Heavy Metals	ICP-MS	09/12/2026	Pass
Microbiological	Petrifilm/qPCR	09/13/2026	Pass



Serving Size: N/A

Label Claim Profile

Analyte	Result	Specification	LOD
Thymosin Alpha-1	Vial 1 = 10.31mg/vial	10mg/vial	0.1%
Thymosin Alpha-1	Vial 2 = 10.26mg/vial	10mg/vial	0.1%
Identity of the analyte was confirmed by retention time concordance with a certified reference standard, per USP <621>.			
Chromatographic Purity	Vial 1 = >99%	>99%	0.1%
Chromatographic Purity	Vial 2 = >99%	>99%	0.1%
Bacterial Endotoxins (Gel-Clot: 1:10 Dilution)	<1.25 EU/ml	<5 EU/ml	λ = 0.125 EU/mL
Fentanyl	Vial 1 = Not Detected	<LOD	10ppm
Fentanyl	Vial 2 = Not Detected	<LOD	10ppm

NOTES: Lyophilized samples 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 independently tested to evaluate batch consistency and vial-to-vial variability.

LOD = LIMIT OF DETECTION; LOQ = LIMIT OF QUANTIFICATION

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Noel Samsum
Laboratory Director
16-Sep-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.

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Heavy Metal Analysis (USP <233>)

Analyte	Result (mcg/vial)	LOQ (ppm)	LOD (ppm)	Limit (mcg/g)	Pass/Fail
Arsenic	**<LOQ**	0.010	0.005	0.5	Pass
Cadmium	**<LOQ**	0.010	0.005	0.1	Pass
Lead	**<LOQ**	0.010	0.005	0.5	Pass
Mercury	**<LOQ**	0.010	0.005	0.1	Pass

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

Microbe	Result	Limit	Pass/Fail
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

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