CERTIFICATE OF ANALYSIS

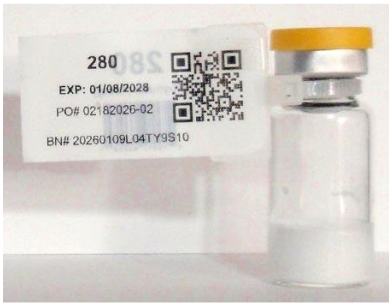
Artifact ID: coa_68d4b8c524b766fd22d4b62c13422377

ORDERED BY
Purity Analytics

PRODUCT
NAME: Thymalin 10mg
CATEGORY: Identity + Purity + Assay + Heavy Metals + Microbial

SAMPLE
BATCH: 20260109L04TY9S10
TESTED: 2026-04-14

PERFORMING LAB **Analytical Formulations, Inc.**
8940 Fourwinds Drive STE 107, Windcrest, TX 78239
https://analyticalformulations.com
Lab-certified result data: 2026-06-02



Submitted vial

DIGITALLY SIGNED BY
Purity Analytics LLC

ISSUED	2026-08-07 22:38:48 UTC
ISSUER	Sectigo RSA Document Signing CA
ALGORITHM	RSA-SHA512
FIELD	PuritySignature
TYPE	adbe.pkcs7.detached
CERT SERIAL	80EE9C34821454C706346FA64888B1B5
TIMESTAMP	Sectigo RFC 3161 TSA

Click this panel in Adobe Reader to validate the embedded signature. Cryptographic validity is also shown at verify.purityanalytics.com.

ANALYTICAL RESULTS

COMPONENT	ANALYTE	SPECIFICATION	RESULT	P/F
Thymalin/Thymulin	Qualitative ID (Lambda Max)	TS λmax is a match compared to its characteristic reference standard.	**Matches**	✓
	Percent Purity	NLT 98% $r_{xy} = \frac{\Sigma (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\Sigma (x_i - \bar{x})^2} \cdot \sqrt{\Sigma (y_i - \bar{y})^2}}$	**99.6 %**	✓
Thymalin/Thymulin	Quantitative Assay	NLT 95% label claim $\% = \frac{A_{TS}}{A_{STD}} \times \frac{C_{STD}}{C_{TS}} \times 100$	**10.34 mg**	✓
	Heavy Metals (Total Quantity)	NMT 150 ppb/vial (including Pb, Cd, Hg, Ni, Fe & Co)	**<10 ppb**	✓
	TAMC (Aerobic/Coliform)	NMT 1,000 CFU · Incubated 48 hrs @ 37°C	**0 CFU**	✓
	TYMC (Yeast & Molds)	NMT 100 CFU · Incubated 48 hrs @ 30°C	**0 CFU**	✓

Verify at https://verify.purityanalytics.com/coa/coa_68d4b8c524b766fd22d4b62c13422377
Signed by Purity Analytics LLC
Artifact coa_68d4b8c524b766fd22d4b62c13422377 · Rendered 2026-08-07T22:38:48Z

METHODS & PERFORMING LABORATORY

METHODS

- Qualitative ID - Lambda Max
- Quantitative Assay - Beer-Lambert
- TAMC (Total Aerobic Microbial Counts)
- Percent Purity - Correlation Coefficient
- Heavy Metals - Total Quantity
- TYMC (Total Yeast and Mold Counts)

Microbial specifications follow the Substances for Pharmaceutical Use compendium. UV-Vis measurements performed on a Jenway 6715 UV/Vis Spectrophotometer.

PERFORMING LABORATORY

Analytical Formulations, Inc.

8940 Fourwinds Drive STE 107, Windcrest, TX 78239

https://analyticalformulations.com

A laboratory-authorized user certified on 2026-06-02 that the submitted result data and the Purity Analytics COA generated from that data accurately represent the laboratory's reported findings for the sample identified in this report.

**RESEARCH USE ONLY. ANALYTICAL INFORMATION ONLY.
NOT FOR HUMAN OR VETERINARY CONSUMPTION. NOT FOR CLINICAL, DIAGNOSTIC, THERAPEUTIC, OR DRUG USE.**

Laboratory role.
The performing laboratory identified above performed or reported the analytical measurements reflected in this Certificate of Analysis for the submitted sample only. The laboratory's role is limited to analytical testing and reporting of the sample as received. The laboratory does not manufacture, package, relabel, market, prescribe, recommend, dispense, distribute, or sell the product identified in this report.

Research-use-only limitation.
This Certificate of Analysis, the underlying measurements, and all related laboratory information are provided solely for research-use-only materials and analytical reference. Neither Purity Analytics LLC nor the performing laboratory certifies, represents, or warrants that the product is safe, sterile, effective, lawful, fit, or appropriate for human use, veterinary use, diagnostic use, therapeutic use, clinical use, dietary use, cosmetic use, drug use, resale, or any other regulated or consumer-facing use.

No endorsement or warranty.
Issuance of this report does not constitute approval, endorsement, sponsorship, recommendation, quality guarantee, regulatory clearance, or legal compliance determination by Purity Analytics LLC, the performing laboratory, or any of their respective owners, members, officers, directors, employees, contractors, partners, vendors, suppliers, affiliates, licensors, service providers, customers, or agents. All such parties disclaim, to the maximum extent permitted by law, all express or implied warranties and all liability arising from downstream handling, marketing, labeling, storage, sale, distribution, possession, or use of the product.

No substitution for independent review.
Users are solely responsible for determining whether the product, sample, acceptance criteria, testing program, labeling, marketing claims, distribution, possession, and end use comply with all applicable laws, regulations, contracts, and internal quality requirements. This report is not legal, medical, regulatory, safety, toxicology, sterility, or suitability advice.

DISCLAIMER & SCOPE OF TESTING

**FOR RESEARCH USE ONLY. ANALYTICAL INFORMATION ONLY.
NOT FOR HUMAN OR VETERINARY CONSUMPTION. NOT FOR DIAGNOSTIC, THERAPEUTIC, CLINICAL, OR DRUG USE.**

The product analyzed in this Certificate of Analysis has not been evaluated by the U.S. Food and Drug Administration and is not intended to diagnose, treat, cure, or prevent any disease. Issuance of this Certificate of Analysis does not constitute FDA approval, clearance, registration, endorsement, or authorization of the product, its manufacturer, its distributor, the performing laboratory, Purity Analytics LLC, or any use thereof.

Sample scope.
Test results apply only to the specific sample identified by the SKU and Batch/Lot number on this report. The performing laboratory tested or reported the sample as received; chain of custody from the manufacturer, customer, distributor, or any upstream party to the laboratory is not certified by Purity Analytics LLC or the laboratory unless expressly stated in this report. Subsequent handling, storage, repackaging, reconstitution, relabeling, resale, distribution, or modification by any party may alter the attributes reported here.

Method scope.
Pass/fail determinations reflect compliance with the acceptance criteria explicitly listed in this report and do not imply compliance with any criterion not listed. Each analytical method has inherent detection limits and measurement uncertainty; results are reported in accordance with the performing laboratory's validated standard operating procedures or the submitted laboratory data used to prepare this Purity Analytics COA.

No warranty.
This data is presented in good faith and on an "as-is" basis. Purity Analytics LLC, the performing laboratory, and their respective partners, vendors, contractors, suppliers, service providers, affiliates, customers, licensors, and agents make no express or implied warranty of merchantability, fitness for any particular purpose, non-infringement, safety, sterility, efficacy, regulatory compliance, or suitability with respect to the analyzed product. Reliance on this report is at the sole risk of the user; independent verification is the responsibility of the user.

Compliance.
Purchase, possession, and use of the analyzed product are subject to applicable federal, state, and local laws and regulations, which the user is solely responsible for ascertaining and complying with. This report is not a legal, regulatory, medical, clinical, toxicology, safety, sterility, or suitability opinion.

Use of this report.
This Certificate of Analysis may be reproduced and distributed in its entirety for purposes of authenticity verification. Modification, selective quotation, partial reproduction, or use of this report to imply approval, endorsement, safety, efficacy, legality, or suitability for any non-research use is not authorized.

— END OF REPORT —

Verify at https://verify.purityanalytics.com/coa/coa_68d4b8c524b766fd22d4b62c13422377
Signed by Purity Analytics LLC
Artifact coa_68d4b8c524b766fd22d4b62c13422377 · Rendered 2026-08-07T22:38:48Z