Purity Analytics

CERTIFICATE OF ANALYSIS

Artifact ID: coa_5e53ed86aa44d639a8f03ecb7f09c52c

ORDERED BY
Purity Analytics

PRODUCT
NAME LL-37
CATEGORY —

SAMPLE
BATCH LL375202026
TESTED 2026-05-13

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 22:38:30 UTC
ISSUER	Sectigo RSA Document Signing CA
ALGORITHM	RSA-SHA512
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TYPE	adbe.pkcs7.detached
CERT SERIAL	80EE9C34821454C706346FA64888B1B5
TIMESTAMP	Sectigo RFC 3161 TSA

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ANALYTICAL RESULTS

COMPONENT	ANALYTE	SPECIFICATION	RESULT	P/F
LL-37	Qualitative ID	TS λmax is a match compared to its characteristic reference standard	**Matches**	✓
	Percent Purity (Correlation Coefficient)	NLT 98% $r_{xy} = \frac{\Sigma (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\Sigma (x_i - \bar{x})^2} \cdot \sqrt{\Sigma (y_i - \bar{y})^2}}$	**99.8 %**	✓
LL-37	Quantitative Assay (Beer-Lambert)	NLT 95% label claim (mg/vial) $\% = \frac{A_{TS}}{A_{STD}} \times \frac{C_{STD}}{C_{TS}} \times 100$	**5.79 mg**	✓
	Heavy Metals (Total Quantity)	NMT 100ppb/vial (Pb, Cd, Hg, Ni, Fe, Co)	**<50 ppb**	✓
	TAMC (Total Aerobic Microbial Counts)	NMT 100 CFU @ 37°C/48h	**0 CFU**	✓
	TYMC (Total Yeast and Mold Counts)	NMT 10 CFU @ 30°C/48h	**0 CFU**	✓

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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.

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— END OF REPORT —

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