Purity Analytics

# CERTIFICATE OF ANALYSIS

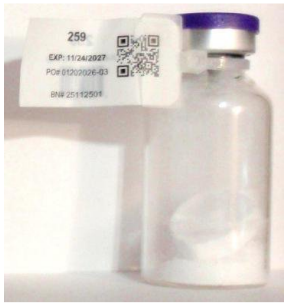
Artifact ID: coa_1f9d019134ef97846631d0e9bbb6f790

**ORDERED BY**
Purity Analytics

**PRODUCT**
NAME Glutathione
CATEGORY —

**SAMPLE**
BATCH GLU500031828
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 22:38:37 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 |
|---|---|---|---|---|
| L-Glutathione (reduced) | Qualitative ID | TS λmax is a match compared to its characteristic reference standard | **Matches** | ✓ |
| | Percent Purity (Correlation Coefficient) | NLT 98% $r_{xy} = \frac{\Sigma (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\Sigma (x_i - \bar{x})^2} \cdot \sqrt{\Sigma (y_i - \bar{y})^2}}$ | **99.4 %** | ✓ |
| L-Glutathione (reduced) | Quantitative Assay (Beer-Lambert) | NLT 95% label claim (mg/vial) $\% = \frac{A_{TS}}{A_{STD}} \times \frac{C_{STD}}{C_{TS}} \times 100$ | **1,549.2 mg** | ✓ |
| | Heavy Metals (Total Quantity) | NMT 100ppb/vial (Pb, Cd, Hg, Ni, Fe, Co) | **<10 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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