

CERTIFICATE OF ANALYSIS

Third-party analytical testing · summary cover sheet

Semax (10mg)

AVL-XA10

AVATA LABS SKU	AVL-XA10
BATCH / LOT	20251219L04XA2S10
DATE TESTED	2026-03-21
PURITY (HPLC-UV)	99.9%
PERFORMING LAB	Analytical Formulations, Inc.
SCOPE	Identity · Microbial · Heavy metals
ARTIFACT ID	coa_4fd76d746f70d62ea158ca7c71a7a91a

INDEPENDENTLY VERIFIABLE

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ORDERED BY



AVATA LABS

Avata Labs

PRODUCT

NAME Semax 10mg
SKU YPB.229
CATEGORY Identity + Purity +
Assay + Heavy Metals +
Microbial

SAMPLE

BATCH 20251219L04XA2S10
TESTED 2026-03-21

DESCRIPTION

Vial with white powder — sealed with plastic security cap. Flag tag attached at neck with manufacturer / product SKU number, PO, and expiration.

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 — YPB.229



DIGITALLY SIGNED BY
Purity Analytics LLC

ISSUED 2026-06-21 16:55:01 UTC
ISSUER Sectigo RSA Document Signing CA
ALGORITHM RSA-SHA512
FIELD PuritySignature
TYPE adbe.pkcs7.detached
CERT SERIAL 80EE9C34821454C706346FA64888B1B5
CERT SHA-256 E2467E56CFEE3DA8...AF9CBF0875552610
TIMESTAMP Sectigo RFC 3161 TSA

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ANALYTICAL RESULTS

COMPONENT	ANALYTE	SPECIFICATION	RESULT	P/F
Semax	Qualitative ID (Lambda Max)	TS λ_{max} is a match compared to its characteristic reference standard.	Matches	✓
	Percent Purity	NLT 98% $r_{xy} = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{\sqrt{\sum (x_i - \bar{x})^2} \cdot \sqrt{\sum (y_i - \bar{y})^2}}$	99.9 %	✓
Semax	Quantitative Assay	NLT 95% label claim $\% = \frac{A_{TS}}{A_{STD}} \times \frac{C_{STD}}{C_{TS}} \times 100$	10.35 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	✓



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METHODS

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



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PERFORMING LABORATORY & CERTIFICATION

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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NOT FOR HUMAN OR VETERINARY CONSUMPTION. NOT FOR CLINICAL, DIAGNOSTIC, THERAPEUTIC, OR DRUG USE.

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DISCLAIMER & SCOPE OF TESTING

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