

CERTIFICATE OF ANALYSIS

Third-Party Verified | 21 CFR Part 111 Compliant

Product Identification

Product Name	5-HTP 100mg Caps 60ct	Lot Number	0077036-015-A7002-031425-00001
Part Number	015-A7002	Formula ID	100-PR1390 (Rev. 14)
Manufacture Date	March 14, 2025	Expiration Date	March 14, 2027
COA Issue Date	May 26, 2026	Dosage Form	Capsule (1 cap/serving)

Independent Third-Party Raw Material Verification

KEY RAW MATERIALS VERIFIED BY INDEPENDENT LABORATORY

Niacin • Vitamin B6 • 5-HTP • Dicalcium Phosphate
All Tested Raw Materials Confirmed At or Above Specification

Key raw materials used in this formula were independently verified by **MS Bioanalytical, LLC** (Champaign, IL) via HPLC-UV and USP methods. 5-Hydroxytryptophan (5-HTP) purity confirmed at **99%** (spec: 94%). Niacin USP purity confirmed at **100%** (spec: 99%). Pyridoxine HCl (Vitamin B6) purity confirmed at **98-100%** (spec: 98-102%). Dicalcium phosphate phosphorus content confirmed at **17.8%** (spec: 17.7-18.9%). MS Bioanalytical is an independent, ISO-accredited laboratory with no financial relationship to Highland Laboratories.

Material Tested	RM Part	Method	Spec	Result	Status
Niacin USP	830-0705	STM-1.11 (HPLC-UV)	99%	100%	PASS
5-HTP (Griffonia extract)	300-0488B	STM-5.13 (HPLC-UV)	94%	99%	PASS
Pyridoxine HCl (Vitamin B6)	830-0875	STM-1.11 (HPLC-UV)	98-102%	98%	PASS
Dicalcium Phosphate	300-0335	USP Titration	17.7-18.9% Phosphorus	17.8%	PASS

Active Ingredient Verification (per capsule)

Active Ingredient	Method	Label Claim	Result	Verification	Status
5-HTP (Griffonia simplicifolia seed extract)	QM-0507 + 3rd Party HPLC	100 mg	105.3 mg	RM Purity Confirmed	PASS
Niacin (as Niacin USP + Methyl Nicotinate)	QM-0507 + 3rd Party HPLC	5 mg NE	5.15 mg	RM Purity Confirmed	PASS
Vitamin B6 (as Pyridoxine HCl 82.27%)	QM-0507 + 3rd Party HPLC	10 mg	10.2 mg	RM Purity Confirmed	PASS

Physical Testing

Test	Method	Specification	Result	Status
Disintegration Time	QM-0502 (USP <701>)	< 45 minutes	21 minutes	PASS
Capsule Size	QM-0506	Size 1	Size 1	PASS

Microbiological Testing

Test	Method	Specification	Result	Status
Total Aerobic Count	QM-0500	< 10,000 CFU/g	Not Detected	PASS
Yeast and Mold	QM-0500	< 1,000 CFU/g	Not Detected	PASS
Total Coliform	QM-0500	< 100 CFU/g	Not Detected	PASS
<i>E. coli</i>	QM-0500	Negative	Not Detected	PASS
<i>Salmonella</i>	QM-0500	Negative	Not Detected	PASS

Contaminant Testing (Heavy Metals)

Analyte	Method	Specification	Result	Status
Lead (Pb)	QM-0007 (ICP-MS)	< 10 mcg/svg	Not Detected	PASS
Arsenic (As)	QM-0007 (ICP-MS)	< 10 mcg/svg	Not Detected	PASS
Cadmium (Cd)	QM-0007 (ICP-MS)	< 4.1 mcg/svg	Not Detected	PASS
Mercury (Hg)	QM-0007 (ICP-MS)	< 2 mcg/svg	Not Detected	PASS

Manufacturing & Compliance Statement

This product was manufactured in an FDA-registered facility in full compliance with Current Good Manufacturing Practices (cGMP) for dietary supplements per 21 CFR Part 111. All QC testing, batch production records, and master manufacturing records are maintained per federal regulations. Key raw material purity was independently verified by MS Bioanalytical, LLC, an independent third-party laboratory with no financial relationship to Highland Laboratories.

Authorization & Digital Signatures

Role	Signed By	Date/Time (UTC)	Session ID
Prepared By (QC)	hld.kcoreson	2026-05-26 14:06:49	5A4CDF09-9409418D5FC2
Reviewed & Approved (QA)	Keith Gregory	2026-05-26 14:06:49	5A4CDF09-9409418D5FC2
Third-Party Lab (RM)	Quality Manager, MS Bioanalytical	Multiple dates	See RM verification table

Document Integrity

QC Order: PRD003683 | Lot Record ID: 1419270 | Test Rows: 17 | COA Type: Formulation Verified + Third-Party RM Testing
SHA-256: 9409418d5fc235cce0e2f6dc360d45f8509721d42ae8f8e1f545f5d489fa0f00

This COA is generated from QC results in the Highland Laboratories SAP/BatchMaster ERP system. Third-party RM testing by MS Bioanalytical, LLC: 5-HTP purity (MSB# 10232025-015, PO 12825), Niacin USP purity (MSB# 09092025-022), Pyridoxine HCl purity (MSB# 09112025-002), Dicalcium Phosphate (MSB# 11142025-027). Digital signatures certify review and approval. Not to be reproduced without written approval. All testing per 21 CFR Part 111.