



LightLab³ PSY

The HPLC for Psychedelics Analysis



The HPLC for Psychedelic Mushrooms and Related Compounds

Dried Biomass | Wet Biomass | Gummies | Chocolates | Capsules | Extracts | Custom Modes

Why Choose LightLab? In-House, Real-Time Analysis for Mycology

LightLab 3 Psy is a cutting-edge, high performance liquid chromatograph designed specifically for psychedelics producers and mycology enthusiasts. Its user-friendly interface and powerful features make it accessible to non-technical users. With LightLab you will have access to real-time potency information that makes strain hunting, harvest optimization, quality control, R&D, and extraction easier and more efficient than ever before. Enhance your mycology expertise and gain a competitive edge with LightLab 3 Psy.

Strain Selection

Characterize the chemical makeup of different strains, and select those that deliver the desired output and meet customer demand.

Cultivation Control

Flush (harvest) strains or individual mushroom groupings during the highly specific, narrow peak potency window to prevent time-based degradation. Improve yields over time by guiding adjustments to temperature, humidity, substrate, CO₂ levels, or treatments applied. Understand implications of foreign fungi, mold, or pests.

Degradation Management

Degradation of target compounds affects product quality, and is an undesired effect of poor processing, drying or storage conditions. Utilize LightLab to measure and limit degradation.

Quality Assurance

Precisely measure analytes and characterize the chemical makeup of strains to ensure products consistently meet desired specifications.

Substrate Recipe Optimization

Fine tune substrate recipes to achieve fast pinning, reduce aborts, and maximize yields and potency, while ensuring consistent and high quality results.

Extraction Optimization

Stretch the value of target compounds, increase revenues, and create interesting new products. Test throughout the extraction process to optimize temperatures, soak time and solvent choice, and understand biomass vs. output potency and yields.

Dosage Verification

Quantify potency and confirm dosing by using Total Active Psilocin (TAP), reported in milligrams per serving and milligrams per package. Ensure a consistent, accurately dosed and labeled end product.

Sourcing Validation

Make informed materials pricing and procurement decisions by confirming potency of biomass or extracts before purchase. Just a 0.1% variance in potency can have massive revenue implications when scaled and over time.

Analytes Measured

- Psilocybin & Psilocin
- 4-AcO-DMT
- Total Active Psilocin
- Total Tryptamines

Key Features

- Built-in SOPs for 7 sample types plus customizable SOPs
- Factory calibrated w/ traceable standards
- 10-minute run time
- Generates COAs

CONTACT US FOR MORE INFO

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Certificate of Analysis

Scan this QR code to view LightLab 3 Mobile Monitoring, and generate a Certificate of Analysis (CoA). Every LightLab 3 CoA bears a permanent QR code which provides an indelible record of the test. If you scan the QR code on the CoA itself you will be able to view, download and share test results.

Dimensions	18.5 x 6.9 x 14.1 inches
Weight	13.5 pounds
Power Requirements	18V, 1.5A (120-240 AC Adapter included)
Battery Type	Lithium Ion, 14.8V 4400mAh, 8 hours run time, rechargeable
Interface	7" touch screen
Analytical Technique	Variable injection volume liquid chromatography with multiple wavelength UV detector
Result Units	%, mg/serving, mg/package, mg/g, mg/ml
Data Access	On-screen, CSV, CoA, chromatogram, Mobile Monitoring webpage, text, email; Wi-Fi capable, not required for operation
Dried Biomass Detection Limit	0.05%, sample type and analyte dependent
Sample Preparation	pH controlled simple solvent extraction, sample type dependent
Standard Operating Procedures	Automatically generated based on sample type, product presets
Products Measured	Dried biomass, wet biomass, gummies, chocolates, capsules, concentrates, custom modes
Standard Analytes	Psilocybin (PCB), Psilocin (PCN), 4-ACO-DMT (Psilacetin), Total Tryptamines (TT), Total Active Psilocin (TAP)
Measurement Time	8 minutes, sample preparation 2-10 (sample type dependent)
Integration	Barcode reader, keyboard, scale
Warranty	1 year, extended options available



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