

TUMIGlow™ - HLVD Platform

OPTIMIZE HLVD PATHOGEN DIAGNOSTICS IN YOUR CANNABIS FACILITY

A bench top diagnostic device for on-site testing that accurately detects Hop latent viroid.

The TUMIGlow platform provides immediate results that are as reliable and accurate as complex PCR tests - but in your facility.



Why create the TUMIGlow™ platform?

Hop latent viroid (HLVd) is a serious threat to cannabis plants, causing significant yield loss and reducing the quality of the harvested product. Third-party testing can be time-consuming, expensive, and logistically difficult. TUMIGlow™ simplifies testing and screening to help you keep your operation running properly.

The TUMIGlow Solution

Most on-site technologies on the market suffer from complex procedures, poor accuracy, and low throughput. With TUMIGlow you control the whole process, from the sample collection to results. With precision reporting and intuitive operations, you can increase sample processing and ensure yield.

Efficient, Cost - Effective

Compliments in-lab testing with minimal upfront investment for an onsite pathogen testing solution

High Throughput

Processes up to 48 collection tubes in moments for large-scale report generation

Validated Accuracy

Uses an internal control to minimize the potential for false negatives, ensuring accurate results

High Sensitivity

Detects down to 4 viral copies of viroid per microliter, making TUMIGlow the most sensitive on-site test available

What is included in the TUMIGlow Platform?

Starter Kit

- TUMIGlow device
- Heat block
- Collection tube rack
- Reaction tube rack

Reaction Kit

- Collection tubes
- Reaction tubes
- Transfer capillaries
- Labeling stickers

Glow Technology

Isothermal amplification technologies, such as RT-LAMP, streamline procedures with fewer steps and a simplified workflow, making them more time-efficient than PCR's multi-step process. Glow Technology uses a custom version of LAMP to achieve faster results and reduces the risk of false negatives by eliminating the need for multiple temperature cycles.

HLVd Concentration in Sample	Fraction Positive TUMIGlow	Percent Detection Success	Average Cycle Threshold HLVd Target (PCR)	Average Cycle Threshold Plant Target
11 copies/μL	20/20	100%	31.6	27.29
6 copies/μL	20/20	100%	32.4	29.30
4 copies/μL	20/20	100%	33.2	27.98
2 copies/μL	16/20	80%	NaN	26.78
1 copies/μL	10/20	50%	NaN	28.76
0 copies/μL	0/24	0%	NaN	29.35

Limit of detection confirmed in actual customer samples from cultivation location throughout the United States and world.

A limit of detection study (LoD) determines the sensitivity of a test and helps to understand how well a test can find low-level or early infections.

These studies indicated that the assay reliably detects down to 4 viroid copies per microliter. Meaning the Glow Technology only requires 4 viroid copies in one microliter as the lowest quantity of viroid needed to produce a positive result.

Intelligent Software

The TUMIGlow system is paired with intelligent software, enabling cultivators to assess the effectiveness of their pathogen mitigation program using real-time data. The software serves as a digital assistant, organizing and tracking data to give an overview of facility operations and plant health over time. The diagnostic results in these shareable reports empowers cultivators to make informed decisions throughout the facility.



TUMIGlow software records results to create a comprehensive testing history, enabling users to quickly analyze trends and patterns for improved decision-making.

A report includes a photo of the sample results after each run, and a section to record notes or enter data for each test.

