

Meet BiologyWorks - the next level in fast molecular SARS-CoV-2 testing and secured digital verification.



The power of this microbiological automated mini lab is now available to everyone anywhere across the world.

Simply

- Swab
- Dip &
- Know.



Technical and clinical validation studies have been completed*.
 Validation reports available upon request. FDA approval pending.
 *Validation studies performed by or in cooperation with: Streeklab Haarlem, Amsterdam UMC, GGD/National Health Service Dept. NL, UCLA Department of Infectious Diseases.

The new gold standard in testing.

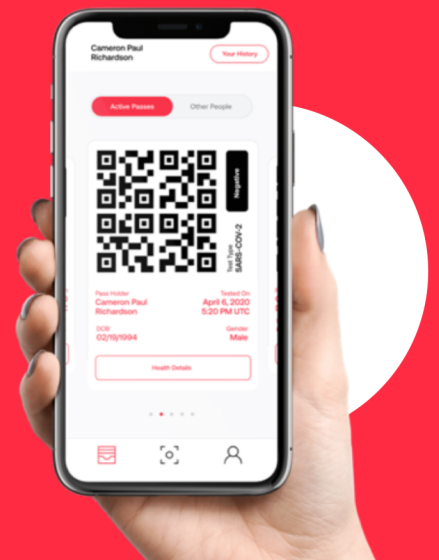


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|---------------------|--|
| Accuracy | 99,8% of RT-PCR sensitivity. |
| Fast | Results within 7-30 minutes. |
| Affordable | Comparable to PCR (but much faster). |
| Digital Backend | Integrated app with enterprise data platform. |
| Convenient | Use anywhere anytime. |
| POC Application | Pharmacies, GPs, Hospitals, Testing Facilities, Care Facilities, Airports. |
| Privacy | No personal data stored. |
| Data Security | GDPR compliant. |
| Decentralised | Testing in remote locations, where there are no labs available. (islands, ships, oil platforms, offshore, mountains, etc.) |
| State-of-the-Art | Advanced polymer and bio-chemistry, electronics, and software. |
| Digital Health Pass | Secured digitally verifiable travel pass available (QR Codes) |
| Detection | Detects any SARS-CoV-2 variants (including Indian, Brazilian, South African, UK & USA). |

The BiologyWorks Test Principles.

- State of the Art
- Unique
- Disruptive

The molecular detection assay uses FLOS-LAMP chemistry to indicate the presence of SARSCoV-2 RNA that is detectable in upper respiratory specimens at an acute phase of viral infection. When the target genes are found in a given sample, the probe chemistry yields a result by fluorescent dyes. Our design targets the SARSCoV-2 RNA from a conserved region at the open reading frame 1ab (ORF1ab) gene and an internal process control, vasa (V), from *Lytechinus variegatus* with a time to result within 30 minutes.



→ Background

Biology Works, Inc. has invented an inexpensive molecular test designed to be performed wherever necessary with little or no training and requiring no infrastructure other than a simple low voltage power supply and a small surface.

Current testing methods must be performed in a laboratory. The BiologyWorks k(now)™ System does not require lab testing because the test is done on-site. The test only requires 30 minutes to be completed and is designed to permit highly accurate molecular testing virtually anywhere people live, work, or congregate. The sensitivity of the test is 99.8% below CT 30. Product development and related studies have been supported by the Alfred Mann Foundation, the Bill and Melinda Gates Foundation, UCLA, StreekLab (Haarlem, The Netherlands), and the University of Washington in the pursuit of a high-quality diagnostic that can be manufactured worldwide, used worldwide, and accepted worldwide to help all of us during an unprecedented global pandemic.

The BiologyWorks k(now)™ COVID-19 Molecular Test is an isothermal loop mediated isothermal amplification (LAMP) diagnostic assay that is built upon a direct RT-LAMP technology for the qualitative detection of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in patient upper respiratory specimens. The molecular response result is determined by a real-time fluorescence read out within the BiologyWorks k(now)™ Fast Molecular Detection Device.

The product is integrated into a comprehensive digital platform that allows clinicians to participate in the testing regardless of where performed and for the end-users to receive validated certificates electronically to permit further activities. Designed to work globally across all types of privacy regimes, the product also supports a wide variety of regulatory requirements. A full “digital thread” has been incorporated for quality management of the entire system, including device and assay usage and performance.

→ Sample POC Airport/Train Station Kiosk



→ Globally Accepted Digital Health Certificates for Travelers

MagnaCerta's Solution

Easily deployed tools for issuance of tamper-proof health certificates.

- Tamper-proof through embedded cryptographic proof
- Portable & inclusive: certificates can be carried either digitally or on paper.
- Full adherence to open-source standards such as W3C Verifiable Credentials and FHIR.
- Infrastructure-light and privacy-preserving: MagnaCerta never stores or is even exposed to patient's PHI/PII.
- Simple deployment using MagnaCerta's web application or through API integration.
- Widely accepted through partnership with The Commons Project.

