

# DetechBeads SARS-CoV-2 RT-LAMP LyoMix



⚠ FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. ⚠

## A Research Reagent for Laboratory Detection of SARS-CoV-2 RNA

Nucleic acid amplification tests such as RT-PCR require specialised equipment and extended reaction times. The DetechBeads SARS-CoV-2 RT-LAMP LyoMix is a ready-to-use research reagent designed for rapid isothermal amplification of SARS-CoV-2 RNA in a laboratory setting.

DetechBeads SARS-CoV-2 RT-LAMP LyoMix offers a lyophilised, ready-to-use format for laboratory LAMP-based RNA detection. Loop-mediated Isothermal Amplification (LAMP) is a nucleic acid amplification technique under isothermal conditions. Results are obtained within 30 minutes, and the lyophilised bead format is stable at room temperature, making it suitable for use with standard laboratory thermocyclers.

### Analytical Performance

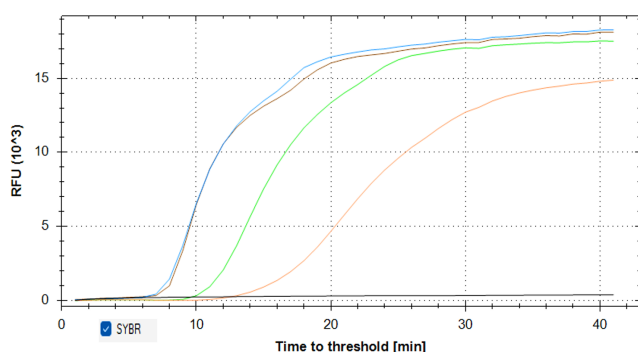
The DetechBeads SARS-CoV-2 RT-LAMP LyoMix contains a special LAMP primer-set designed for the amplification and detection of SARS-CoV-2 RNA, and can detect as low as 100 SARS-CoV-2 copies of RNA per reaction at 65°C within 30 minutes colorimetrically.

The primer-set is compatible with over 35\* relevant SARS-CoV-2 RNA controls available on the market.

*Research data generated using SARS-CoV-2 RT-LAMP Beads with 0.5 µl fluorescent dye 50X and SARS-CoV-2 RNA Control (synthetic RNA, in vitro conditions). These data reflect fluorescent detection and do not represent the analytical sensitivity of the colorimetric readout format supplied. For Research Use Only.*

*\*tested in-silico*

### Product Features



- 1000 copies/µl
- 500 copies/µl
- 100 copies/µl
- 10 copies/µl

Negative control:

- Nuclease-free water: 23µl;
- Template RNA: 2µl;
- Final volume of LAMP reaction: 25µl

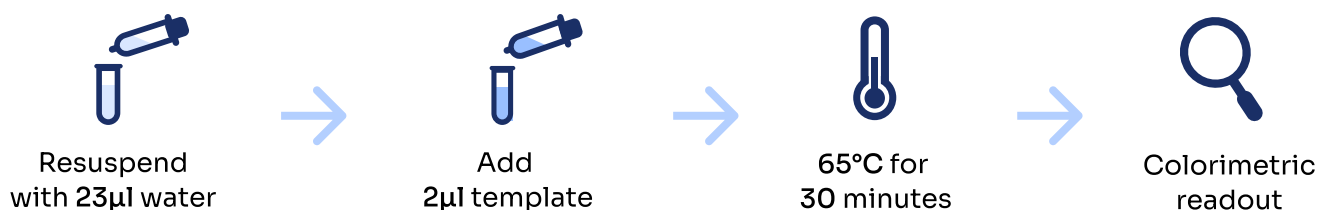
Sensitivity tests performed using SARS-CoV-2 RT-LAMP Beads with fluorescent dye and synthetic SARS-CoV-2 RNA Control.

Colorimetric change is noticed when reaction turns from pink (no-reaction/negative) to yellow (positive).

- Utilizes robust Bst DNA polymerase for LAMP
- Ready-to-use format with results in 30 minutes
- Thermostable reverse transcriptase for RNA samples
- Suitable for use in common PCR and RT-PCR thermocyclers

## Applications Overview

The use of the lyophilised LAMP bead is as simple as 1-2-3. First, 23 µl of water is resuspended to the PCR tube containing the bead. Second, 2 µl of **purified RNA (e.g., from an appropriate RNA extraction kit)** is added. Finally, the tube is incubated at 65°C for 30 minutes. A colour change from pink to yellow indicates **amplification of the SARS-CoV-2 RNA target** in the sample. The colours are very bright and saturated, and moreover, the beads' low foaming property makes it easy to read the results.



## Product Specifications

The DetechBeads SARS-CoV-2 RT-LAMP LyoMix are available in different formats to suit various needs. A single SARS-CoV-2 RT-LAMP bead consists of a ready-made pre-mix consisting of Bst polymerase, reverse transcriptase, SARS-CoV-2 specific LAMP primers, dNTPs, dUTPs and the necessary salts required to carry out the reaction.

*Safety Data Sheet (SDS) available on request. Handle in accordance with good laboratory practice.*

| Product                                        | Quantity              | Product-ID      | Price  |
|------------------------------------------------|-----------------------|-----------------|--------|
| DetechBeads SARS-CoV-2 RT-LAMP LyoMix, 1 Pack  | 8 Tube PCR Strip x 8  | DG-DB-COV2-PK01 | 249€   |
| DetechBeads SARS-CoV-2 RT-LAMP LyoMix, 5 Pack  | 8 Tube PCR Strip x 40 | DG-DB-COV2-PK05 | 1,229€ |
| DetechBeads SARS-CoV-2 RT-LAMP LyoMix, 10 Pack | 8 Tube PCR Strip x 80 | DG-DB-COV2-PK10 | 2,419€ |

**⚠ FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. ⚠**

*Performance characteristics have not been established for diagnostic use in humans.*

