DetechBeads
RSV RT-LAMP LyoMix

Detechgene

Rapid Detection of RSV

A major challenge of diagnostics is time. PCR being the gold standard, often utilizes expensive equipment, labor and reagents, and reactions taking more than an hour. Detection of RSV (Respiratory Syncytial Virus) is heavily reliant on PCR for diagnosis.

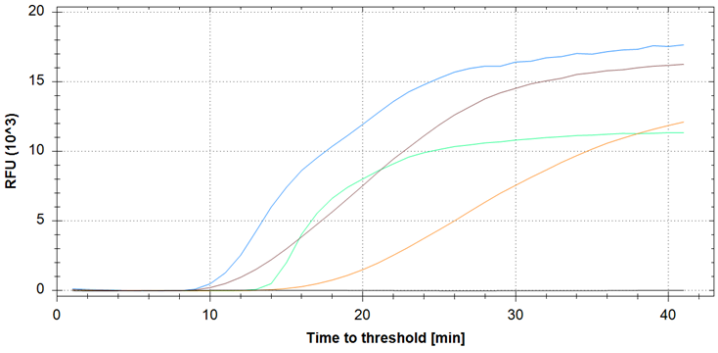
Here we present Detechgene's alternative to PCR and rapid antigen tests, offering levels of specificity and sensitivity rivalling that of PCR in the form of lyophilized LAMP beads. Loop mediated Isothermal Amplification (LAMP) is an isothermal nucleic acid amplification technique which offers specificity and sensitivity matching PCR. The results are obtained under 30 minutes and as the lyophilized bead could be stored in room temperature, it is a perfect point-of-care (POC) option for quick detection.

Specificity and Sensitivity

The DetechBeads RSV RT-LAMP LyoMix contains a special LAMP primer-set designed for the detection of RSV A and B viruses and can detect as low as 500 RSV A/B copies of RNA per reaction at 65°C within 30 minutes.

**tested in-silico*

Product Features



- 2500 copies/µl (RSV B)
- 500 copies/µl (RSV B)
- 2500 copies/µl (RSV A);
- 500 copies/µl (RSV A)

Negative control:

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

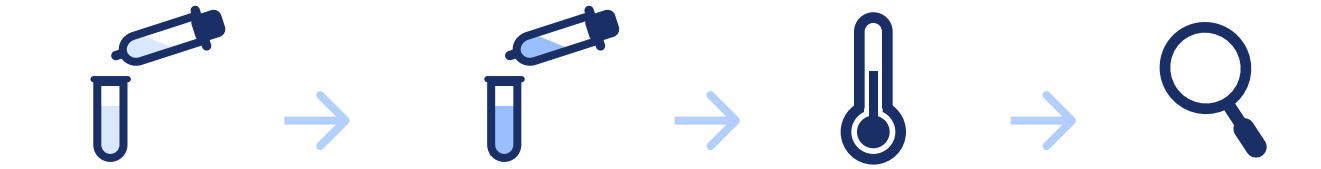
Sensitivity tests performed using RSV RT-LAMP Beads with fluorescent dye and synthetic RSV A and B RNA Controls.

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

- Utilizes robust Bst DNA polymerase for LAMP
- Thermostable reverse transcriptase for RNA samples
- Sensitive and specific to detect various strains of RSV A and B viruses
- Ready-to-use format with accurate results in 30 minutes
- Compatible with fluorescent dye for real-time readouts
- Suitable for use in common PCR and RT-PCR thermocyclers

Applications Overview

The use of the lyophilized LAMP bead is as simple as 1-2-3. First, 23µl of water is resuspended to the PCR tube containing the bead. Second, 2µl of RNA extracted from saliva or nasal mucus is added. Finally, the tube is incubated at 65°C for 30 minutes. The change in color, from pink to yellow, indicates the presence of RSV in the sample. The colors are very bright and saturated, and moreover, the beads' low foaming property makes it easy to read the results.



Resuspend with **23µl** water

Add **2µl** template

65°C for **30** minutes

Colorimetric readout

Product Specifications

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

Product	Quantity	Product-ID	Price
DetechBeads RSV RT-LAMP LyoMix, 1 Pack	8 PCR-Strips with 8 beads each	DG-DB-RSV-PK01	249€
DetechBeads RSV RT-LAMP LyoMix, 5 Pack	40 PCR-Strips with 8 beads each	DG-DB-RSV-PK05	1229€
DetechBeads RSV RT-LAMP LyoMix, 10 Pack	80 PCR-Strips with 8 beads each	DG-DB-RSV-PK010	2419€

All RT-LAMP beads are intended for Research Use Only (RUO) and not for use in diagnostic procedures

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