HYASEN BIOTECH
华 晨 生 物

RT-LAMP Probe Master Mix

Cat.No.:HYB415

Product Description

This product contains reaction buffer, Bst DNA polymerase and RT-Enzymes Mix of thermostable reverse transcriptase, and freeze-dried protective agent components. The reaction buffer contains Mg^{2+}, dNTP and other necessary components for amplification. When using, you only need to mix the buffer, reaction enzyme, primer probe and add the template; it can also be used to prepare a freeze-dried reaction system. After adding the freeze-dried protective agent, it can be directly freeze-dried in a freeze dryer. When using, you only need to add the primer probe and template. This reagent has high amplification efficiency and sensitivity.

Components

Components	96 T	960 T	9600 T
Loop-mediated Amplification Buffer	1 mL	2.5 mL×4	10 mL×10
RT-Enzymes Mix	360 μL	3.6 mL	3.6 mL×10
Lyoprotectant	1 mL	2.5 mL×4	10 mL×10

Storage

Store at -25～-15℃,valid for 12 months

Instructions

1. Take out the buffer and thaw it. Vortex thoroughly before use, and centrifuge briefly to collect the liquid at the bottom of the tube.
2. Preparation of reaction system：This reagent has two types of reaction systems: liquid reaction system and freeze-dried reaction system.Please choose according to the specific usage.

1) Preparation of liquid reaction system

Component	Volume
Loop-mediated Amplification Buffer	10 uL
RT-Enzymes Mix	3.6 μL
10×Primer probe Mix*	5 μL
Template RNA**	X μL

Nuclease-free Water	Up to 50 μL

2) Preparation of freeze-dried reaction system

① Preparation of freeze-dried system

Component	Volume
Loop-mediated Amplification Buffer	10 uL
Lyoprotectant	10 uL
RT-Enzymes Mix	3.6 μL
Nuclease-free Water	Up to 25 μL

② Freeze-drying

Freeze-dry the prepared Mix according to the 25μL system.

③ Preparation of reaction system

Component	Volume
Freeze-dried products	1 Piece
10×Primer probe Mix*	5 μL
Template RNA**	x μL
Nuclease-free Water	Up to 50 μL

*10×Primer Mix concentration: 16 μM FIP/BIP, 2 μM F3/B3, 4 μM Loop F/B，4 μM probe;

**It is recommended to dissolve the nucleic acid template in DEPC water.

3. Amplification reaction

Set up the following program on a fluorescent PCR instrument (such as ABI7500, etc.).

Temperature	Time	Cycles
65℃	60s *Collect FAM fluorescence	30

Notes

1. After the buffer is melted, there may be white precipitate, which can be clarified by mixing thoroughly at room temperature;
2. The reaction temperature can be optimized between 62℃-68℃ according to the primer situation;
3. The experiment should be operated in a standardized manner, including the preparation of the reaction system, freeze-drying, sample processing and sample addition;

4. To avoid contamination, it is recommended to prepare the reaction system in a clean bench and add the template in a fume hood in other rooms to avoid false positive interference.