PRODUCT INFORMATION

2X RT-LAMP Master Mix

v. 230101

Catalog number C15017-1ML

Set package

Cat.	Name	Amount
C15017-1ML	2X RT-LAMP Master Mix	1 mL

Description

Croyez 2X RT-LAMP Master Mix is an optimized master mix for reverse-transcription loop-mediated isothermal amplification (RT-LAMP) reactions. This product is a dual enzyme system, providing a rapid and sensitive detection in one pot. The amplified products can be detected by agarose gel electrophoresis.

Storage

Stored at -20°C. **Avoid repeated freeze/thaw cycles.**

Manuel

The following procedure is a general guideline for RT-LAMP reaction. To maintain an RNase-free environment, always wear disposable gloves, and use laboratory consumables and water of nuclease-free grade during the whole experiment course.

RT-LAMP reaction set-up:

1. 10X LAMP primer mix

Component	10X concentration	Final concentration
FIP	16 μM	1.6 μM
BIP	16 μM	1.6 μM
F3	2 μM	0.2 μM
B3	2 μM	0.2 μM
LOOP F	8 μM	0.8 μM
LOOP B	8 μM	0.8 μM

2. An overview of the reaction set-up is listed in the table below. Place all require reagents **on ice**. Distribute appropriate volumes into each tube before adding template.

Component	Amount	Final concentration
2X RT-LAMP Master Mix	12.5 μL	1X
10X LAMP primer mix	2.5 μL	1X
RNA template	1-2 μL	variable
Nuclease-Free H_2O	X μL	-
Total reaction volume	μL	-

* See Usage Notes for additional guidelines on primer/template preparation.

	3. Add target RNA template to the detection tube. Gently mix the reaction thoroughly to achieve uniform distribution and avoid making bubbles. 4. Incubate at 65°C for 30-60 min. 5. After LAMP reaction complete, the enzyme can be inactivated by heating at 80°C for 10 min.
Usage Notes	***Primer concentration*** Primer concentration can be titrated between 0.25X – 1X if undesired background signal appeared. ***Detection method*** Both detecting the amplified products by agarose gel electrophoresis and turbidity changes due to magnesium pyrophosphate precipitation can be employed to analyze test results, but the latter is somehow less sensitive.

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