



RT-LAMP Isothermal Amplification Kit (RT-LAMP RNaseH2 probe based)

✉ info@ezassay.com

🌐 www.ezassay.com

EZassay Biotechnology Ltd.

Catalog Code: RT-LAM-PB-1
RT-LAM-PB-10

CONTENTS

<u>Contents</u>	<u>Page</u>
Product Introduction	1
Materials supplied	1
Required materials	1
Storage	1
Heat Inactivation	1
Preparation of reagents	3
Notes	3

Product Introduction

This product introduces RNaseH2 enzyme in RT-LAMP reaction system, which greatly increase the specificity.

RT-LAMP-RNaseH2 kit is very suitable for SNP detection.

Materials supplied

Component	LAM-LQ-1	LAM-LQ-10
RT-LAMP Reaction Buffer (2X)	0.7mL*2	14mL*1
RT-LAMP Enzyme Mix (RNaseH2) (25X)	100μL	1mL
Positive Control	80μl	800μl

Required materials

- i. Template RNA
- ii. LAMP primers
- iii. Nuclease-free water or ddH₂O
- iv. Heating block or fluorescence reader with heating function, for example Q-PCR machine.

Storage

-20°C. Suggest aliquot. Avoid repeated freeze-thaw.

Heat Inactivation

85°C for 10 minutes.

RT-LAMP-RNaseH2 probe design

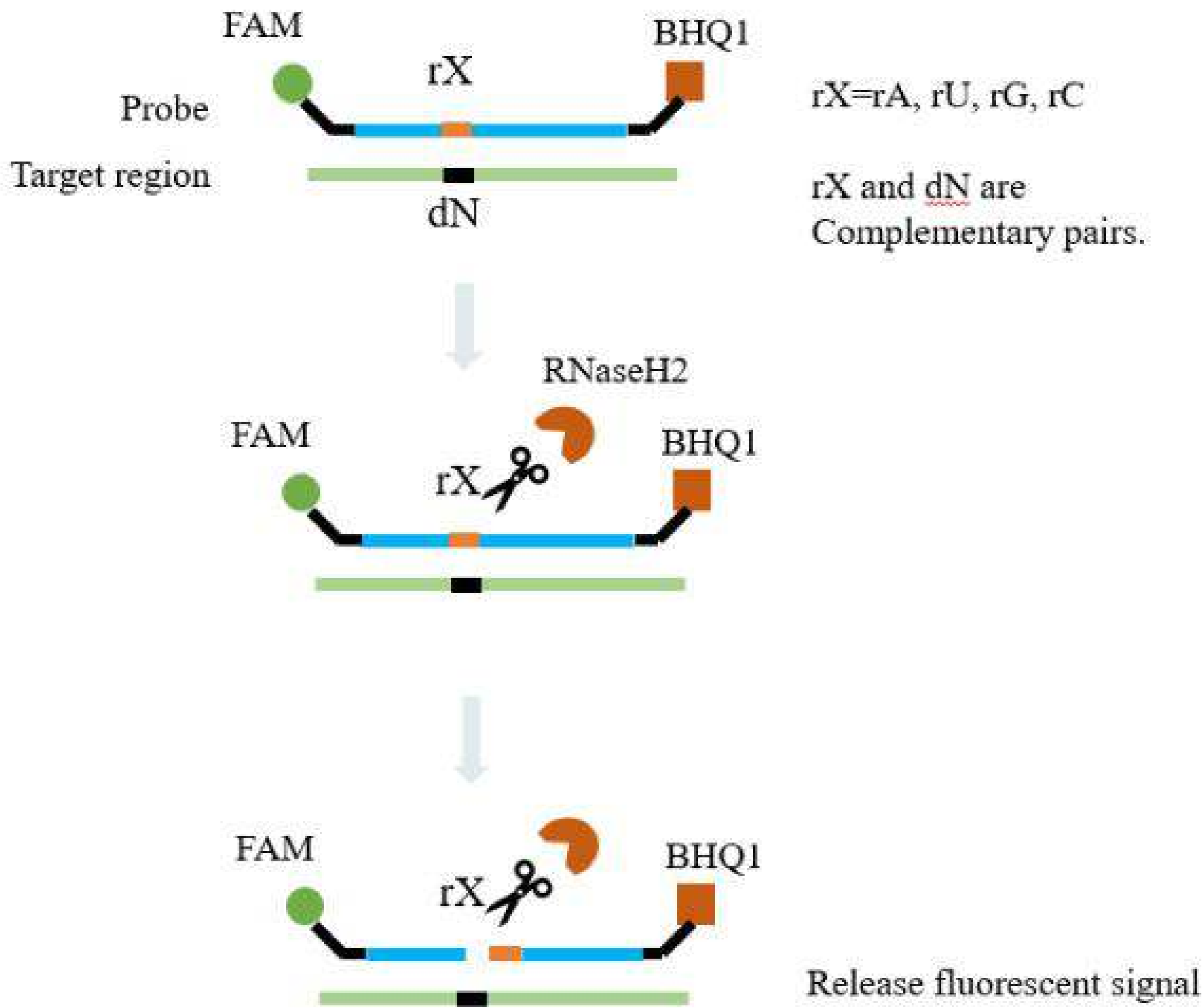
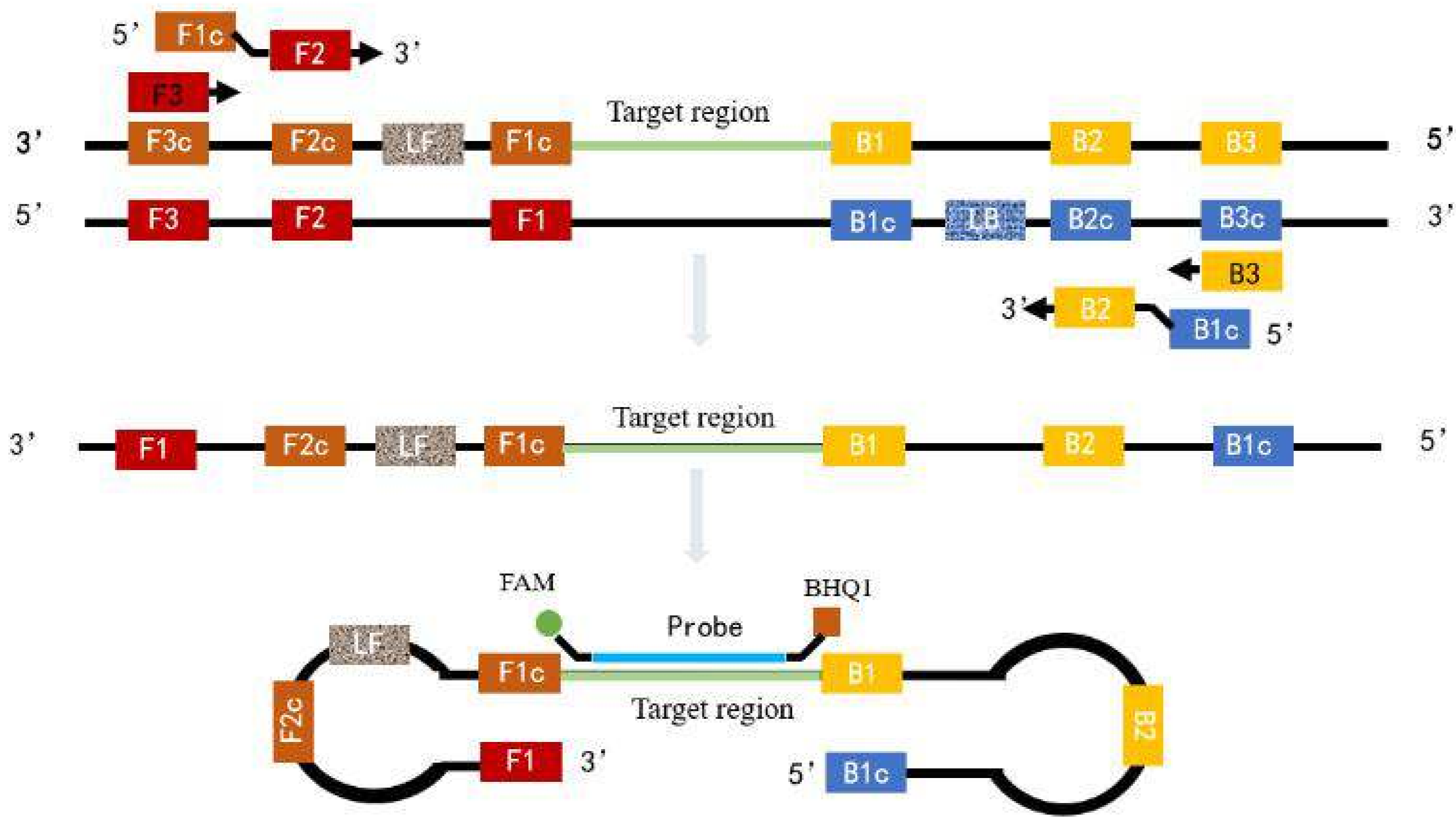


Figure 2. RT-LAMP-RNaseH2 probe design

Preparation of reagents

1、 Prepare reactions as following table. Recommend to operate on ice. Prepare reactions as following table. Recommend to operate on ice.

Component	Volume	Working concentration
RT-LAMP Reaction Buffer (2X)	12.5 μ l	1X
RT-LAMP Enzyme Mix (RNaseH2) (25X)	1 μ l	1X
Primers (10X)	2.5 μ l	1.6 μ M FIP/BIP, 0.4 μ M LF/LB, 0.2 μ M F3/B3,
Probe (5 μ M)	1 μ l	200nM
Template RNA*	1 μ l	>10 copies or more
ddH2O	Up to 25 μ L	-

*For positive control group, add 8 μ l Positive Control that provided in the kit. Template, primers, and probe with FAM label are already mixed as positive control.

2、 Read fluorescence in Q-PCR machine for 30 to 60 minutes at 65°C.

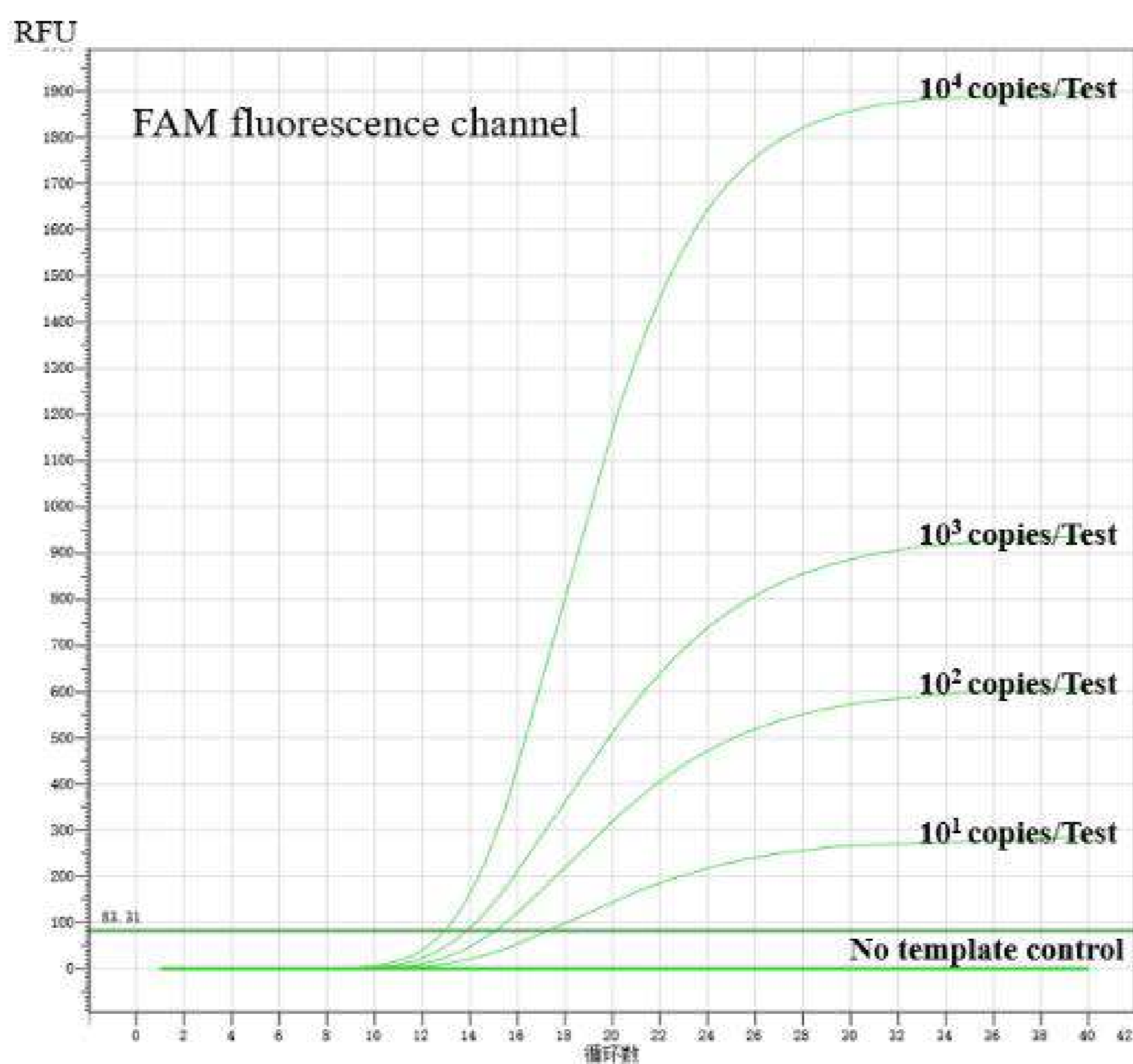


Figure1. typical curve

Notes

- Designate and use distinct areas for sample preparation, reaction setup, and analysis to avoid carry-over contamination.
- It is recommended to add a negative control without template for each experiment.
- To guarantee good reproducibility, it is recommended that the template RNA be added last.
- If Q-PCR machine is used, please make sure to turn off the heat lid function or set to 65 °C.