

HS Universal qPCR Master Mix

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1. Product Introduction

This product is a specialized premix for qPCR reactions using the SYBR Green I intercalating fluorescence method. The core component, Hot-start Taq, is modified based on an antibody method and paired with an optimally buffered system for qPCR, significantly enhancing amplification specificity and detection sensitivity for low-copy genes. It achieves excellent amplification linearity across a wide quantitative range, enabling accurate quantification and detection of target genes with good reproducibility and high reliability. This product is a 2× premix, requiring only the addition of primers and template for convenient use.

2. Precautions

- 2.1 Before use, gently invert the tube several times to mix the contents uniformly without creating bubbles. Perform a brief, gentle centrifugation before use. Inadequate mixing may reduce reaction performance. Do not use a vortex mixer for mixing.
- 2.2 Please place thawed reagents on ice.
- 2.3 This product does not contain ROX reference dye.
- 2.4 Always use new (non-contaminated) pipette tips, microtubes, etc., for preparing and aliquoting the reaction mixture to avoid contamination.

3. Shipping and Storage

Shipped on wet ice. Upon receipt, store at -20°C protected from light.

4. Experimental Procedure

Prepare the following PCR reaction system:

Table 1. HS Universal qPCR Master Mix Reaction Setup

Component	Volume
2 × HS Universal qPCR Master Mix	10 μL
Primer F (10 μM)	0.4 μL
Primer R (10 μM)	0.4 μL
Template DNA	X μL
ddH ₂ O	Up to 20 μL

Recommended PCR Protocol:

Table 2. HS Universal qPCR Master Mix Reaction Setup

Step	Temperature	Time	Cycles
Pre-denaturation	95°C	30 sec~3 min	1 Cycle
Cycling	95°C	10 sec	40 Cycles
	55~60°C	10~30 sec	
	95°C	15 sec	
Melt Curve	60°C	60 sec	1 Cycle
	95°C	15 sec	

The pre-denaturation condition of 95°C for 30 seconds is suitable for most amplification reactions. If the template structure is complex or has high

GC content,the pre-denaturation time can be extended to 3 minutes to improve pre-denaturation effectiveness and facilitate better template release for improved experimental results.

5. Related Products

Product	Cat.No.	Size
HS Universal qPCR Master Mix	BR0014-01	5*1 mL