

# **Real-time Fluorescence Quantitative PCR**

Real-time fluorescence quantitative PCR (qPCR) technology utilizes fluorescent dyes or fluorescently labeled specific probes to track and monitor the PCR products in real-time. We have developed multiple gPCR products, among which the most representative one is Taq SYBR<sup>®</sup> Green qPCR Premix, with its core component being antibody-modified hot-start Tag DNA polymerase. Along with optimized buffer, it ensures high efficiency and specificity of amplification, enabling accurate quantification of a wide range of template concentrations and obtaining stable and reliable qPCR results. Additionally, the Universal version contain a special reference dye compatible with almost all qPCR instruments, eliminating the need to add ROX reference dye on different gPCR instruments.



### **Product Features**

#### •High specificity

Antibody-modified hot-start Tag DNA polymerase, along with optimized buffer, effectively inhibits nonspecific amplification and primer dimer formation.

#### •Compatible with various samples

Shows high efficiency for samples from different sources.

## **Performance Demonstration**

Tomato cDNA (PSBR-2 gene)

#### **Compatible with Templates from Different Sources**





#### Human genomic DNA (DYS14 gene)



6000

5000

4000

2000

1000

0

Ω

RFU 3000

#### •Wide detection range

Enables accurate quantification of a wide range of template concentrations or genes with different abundances.

#### Perfect compatibility

Amplification

Universal version performs excellently when used with different types of qPCR instruments, without additional ROX reference dye.

#### Human cDNA (Actin gene)

#### 1000 800 d(RFU)/dt 600 400 200 10 30 40 0 65 75 80 85 90 95 20 70 Temperature.Celsius Cycles

pUC19 plasmid DNA

Melt Peak

**Good Linear Range** 



Reverse transcription was performed using 1  $\mu$ g of tomato RNA (with genomic DNA contamination removed) as a template. The cDNA product solution was then subjected to a 10-fold serial dilution (10<sup>0</sup>, 10<sup>-1</sup>, 10<sup>-2</sup>, 10<sup>-3</sup>, 10<sup>-4</sup>), which were used as templates for qPCR of the PSBR-2 gene using Taq SYBR<sup>®</sup> Green qPCR Mix.

### **Broad Platform Compatibility**



Using the Tag SYBR<sup>®</sup> Green qPCR Premix (Universal) to amplify genes on different types of qPCR instruments (ABI 7500 Fast, Bio-Rad CFX96, ABI StepOnePlus) yields excellent quantitative results. This demonstrates that the Tag SYBR<sup>®</sup> Green qPCR Premix (Universal) has broad instrument compatibility and does not require ROX reference dye on different instruments.

## Ordering Information

REF No.	Name	Specs	Price (RMB)
EG20110M	Taq-HS SYBR <sup>®</sup> Green qPCR Premix (None Rox)	5×1 ml	880
EG20113M	Taq-HS SYBR <sup>®</sup> Green qPCR Premix (Universal)	5×1 ml	990
EG20410M	Taq-HS SYBR <sup>®</sup> Green qPCR Premix (Rox Separated)	5×1 ml	880
EG20114M	Taq SYBR <sup>®</sup> Green qPCR Premix (None Rox)	5×1 ml	1080
EG20117M	Taq SYBR <sup>®</sup> Green qPCR Premix (Universal)	5×1 ml	1200
EG22104M	Taq SYBR <sup>®</sup> Green qPCR Premix (Rox Separated)	5×1 ml	1080
EG23111L	F488 SYBR qPCR Mix (Universal)	25×1 ml	4000
EG20118M	Taq-HS Probe qPCR Premix (None Rox)	5×1 ml	1080
EG20121M	Taq-HS Probe qPCR Premix (Universal)	5×1 ml	1200
EG22109S	One Step RT-qPCR Probe Kit v2	250 rxns	1600

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2 3 4

1

Log Starting Quantity

SYBR E=99.3% R^2=0.999

Slope=3.338 y-int=28.414

35

30

25

20

15

-3 -2 -1 0

Standard

Unknown