# ClearPeak 2x Probe Master Mix

100 rxn, 500 rxn

### Cat No: PMM1, PMM5

Shipping: Ship with blue ice.Storage: Store at -20°C. Avoid freeze and thaw cycles.

## **General Information**

*ClearPeak* 2x Probe Master Mix is a real-time fluorescence quantitative PCR premix for probe method with a concentration of  $2\times$ . *ClearPeak* 2x Probe Master Mix contains *EcoTaq* DNA Polymerase, PCR buffer, dNTPs, Mg<sup>2+</sup>, enhancers, and stabilizers. All you need to do is add templates, primers, and probes, making the operation simple. *ClearPeak* 2x Probe Master Mix has a dual antibody modified hot start DNA polymerase with a polymerase activity blocking rate of over 95% at temperatures up to 55°C, effectively reducing non-specific amplification at low temperatures. Simultaneously, the combination of a unique PCR buffer system significantly improves the efficiency of qPCR amplification.

**Fast:** PCR lasts less than competitors. *ClearPeak* 2x Probe Master Mix saves your time. **Ecological:** Your PCR wastes less electricity since it lasts shorter. *ClearPeak* 2x Probe Master Mix helps protecting environment.

## **Probe PCR Setup**

Component	Amount
ClearPeak 2x Probe Master Mix	10 µl
TaqMan Assay Probe (20x)	1x
Template cDNA	2-5 µl
ddH <sub>2</sub> O	up to 20 µl
Total	20 µl

### **PCR Reaction Condition**

Temperature	Time	Cycles
95°C	2 min	
95°C	10 sec	40
60°C	30 sec	40

### **Important Notes:**

- Please gently mix the tube upside down before use and avoid foaming as much as possible. Avoid repeated freeze-thaw, as repeated freeze-thaw may cause a decrease in product performance.
- It is recommended to use a two-step PCR reaction program. If good experimental results cannot be obtained due to the use of primers with lower Tm values, a three-step PCR amplification can be attempted.
- In practical operation, corresponding improvements and optimizations should be made to PCR Setup and PCR Reaction Conditions based on different templates, primer structures, and target fragment sizes.
- The concentration of the probe used is related to the fluorescent quantitative PCR instrument used, the type of probe, and the type of fluorescent labeling substance. Please refer to the instrument manual or the specific usage requirements of each fluorescent probe for concentration adjustment during actual use.
- Usually, the amount of DNA templates is based on 10-100ng genomic DNA or 1-10ng cDNA. Due to the different copy numbers of target genes contained in templates of different species, gradient dilution can be performed on the templates to determine the optimal template usage.