



## 2×*Taq* PCR MasterMix

Cat. no. KT201

### Storage

For long term storage, store at -20°C, and *Taq* PCR MasterMix retain full activity for repeated freezing and thawing. For regular use, please store at 4°C.

### Product size

Product components	KT201-01	KT201-02	KT201-11	KT201-12
2× <i>Taq</i> PCR MasterMix	1 ml	5×1ml	1 ml	5×1ml
ddH <sub>2</sub> O	1 ml	5 ml	1 ml	5 ml
Loading dye in MasterMix	Yes	Yes	No	No

### Introduction

*Taq* PCR MasterMix is a 2× concentrated, optimized mixture composed of *Taq* DNA polymerase, dNTPs, MgCl<sub>2</sub>, reaction buffer, PCR reaction enhancer, optimizer and stabilizer. The advantages of 2×*Taq* PCR MasterMix include high convenience, sensitivity, specificity and stability. It minimizes man-made errors during PCR operating process. *Taq* PCR MasterMix is suitable for routine PCR reaction, amplification of complex templates such as GC rich templates (>60%) and templates with secondary structure, and large-scale gene detection.

### Product Components (2×)

0.1U/μl *Taq* Polymerase  
500μM dNTP each  
20mM Tris-HCl (pH8.3)  
100mM KCl  
3mM MgCl<sub>2</sub>  
Stabilizer and enhancer

## Description

2×*Taq* PCR MasterMix is designed for quick and easy preparation of reaction mixture, which minimizes the contamination during PCR operating process.

For PCR reaction set-up, users only need to pipet an aliquot part of 2×*Taq* PCR MasterMix and dilute the MasterMix to 1× by adding templates, primers and water up to the reaction volume. There are two types of this product: MasterMix with loading dye (blue) and MasterMix without loading dye (colorless); PCR products produced by using MasterMix with loading dye can be loaded directly without extra loading buffer.

## Application

- ◆ Gene detection: 2×*Taq* PCR MasterMix is especially suitable for large-scale gene detection, semi-quantitative PCR, detection of tiny amount of DNA, etc.
- ◆ Amplification of DNA and complex templates such as GC rich templates (>60%) and templates with complex secondary structure. The enzyme of *Taq* PCR MasterMix generates PCR products with A-tailing, suitable for TA cloning.

## Example

**Note:** The following example only for reference, user must set up optimal reaction system according to different reaction conditions such as different templates or primers etc.

1. To 25 µl PCR reaction system: 1 kb fragment of human genomic DNA was amplified by using 2×*Taq* PCR MasterMix (If use different reaction system, please proportionally increase or decrease the amount of reaction components referring to this system).

Template	< 1 µg
Primer 1(10 µM)	1 µl
Primer 2(10 µM)	1 µl
2×Master Mix	12.5 µl
ddH <sub>2</sub> O	up to 25 µl

2. PCR cycle set-up

94°C	3 min	
94°C	30 sec	} 30cycles
55°C	30 sec	
72°C	1 min	
72°C	5 min	
3. Result detection: Directly load 5 µl PCR products to agarose gel for PCR detection after the PCR reaction.

The product is used for research only, neither intended for the diagnosis, or treatment of a disease, nor for the food, or cosmetics etc.