TIANGEN®

KT210831

2× Taq PCR Mix

Cat. no. 4992229/4992230/4992255/4992256

Storage

Store at -30~-15°C for up to two years and avoid repeated freezing and thawing. For regular use, please store at 2-8°C for up to three months.

Contents

Contents	4992229	4992230	4992255	4992256
2× *Taq* PCR Mix	1 ml	5 × 1 ml	1 ml	5 × 1 ml
ddH_2O	1 ml	5 ml	1 ml	5 ml
Loading dye in PCR Mix	Yes	Yes	No	No

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HTTP://WWW.TIANGEN.COM/EN

Introduction

Taq PCR Mix is a 2× concentrated, optimized mixture composed of Taq DNA polymerase, dNTPs, $MgCl_2$, 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 Mix 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.

Mix Components (2×)

0.1 U/μl Taq Polymerase
500 μM dNTP each
20 mM Tris-HCl (pH8.3)
100 mM KCl
3 mM $MgCl_2$
Stabilizer and enhancer

Description

2 × *Taq* PCR Mix 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 Mix and dilute the Mix to 1× by adding templates, primers and water up to the reaction volume. There are two types of this product: Mix with loading dye (blue) and Mix without loading dye (colorless); PCR products produced by using Mix with loading dye can be loaded directly without extra loading buffer.

Application

- Gene detection: 2 × *Taq* PCR Mix 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 Mix 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 Mix (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× *Taq* PCR Mix	12.5 μl
ddH_2O	up to 25 μl

2. PCR cycle set-up

94°C	3 min	
94°C	30 sec	} 30 cycles
55°C	30 sec	
72°C	1 min	
72°C	5 min	

3. Result detection: Load 5 μl PCR products to agrose gel for PCR detection.