

# Taq MixII

For research use only

## Cat. No./Spec.

Cat. No	P2011b	P2012b	P2013b	P2014b	P2015b
Spec.	1 ml	1 ml × 5	100 ml	500 ml	1 L

## Description

PCR MixII is an upgraded Hotstart version of PCR Mix, offering better sensitivity, specificity, and reaction speed compared to regular PCR. PCR MixII is a 2X concentrated PCR amplification premix solution containing Hotstart Taq DNA polymerase, dNTPs, buffer, and other essential components for PCR amplification (excluding template and primers). When using it, simply add the template and primers to the amplification system to perform PCR, which greatly simplifies the operation process, reduces operation time, and minimizes contamination. The system also includes an electrophoresis indicator, allowing the PCR amplification products to be directly detected by electrophoresis. The amplified products have a 3'-dA overhang, which can be directly used for TA cloning.

## Components

Component	P2011b	P2012b	P2013b	P2014b	P2015b
2X Taq MixII	1 ml	1 ml × 5	100 ml	500 ml	1 L

## Storage

Store at -20°C for 2 years.

## Applications

- Routine PCR
- Generation of PCR products for TA cloning

## Product Advantages

- Higher sensitivity and specificity.
- Extremely stable with minimal batch-to-batch variation.
- Suitable for a wide range of PCR applications.
- High cost-performance ratio.
- Pre-mixed with indicator dye, allowing direct electrophoresis of products.

## Protocol

### 1. Preparation of reaction solution

Add the following reagents to the proper thermal cycler reaction tube or plate on ice or at RT:

Component	50- $\mu$ l rxn	Final Conc.
2X Taq MixII	25 $\mu$ l	1X
upstream primer (10 $\mu$ M)	2 $\mu$ l	0.4 $\mu$ M
downstream primer (10 $\mu$ M)	2 $\mu$ l	0.4 $\mu$ M
template DNA	x $\mu$ l	-
Water, nuclease-free	to 50 $\mu$ l	-

### 2. Perform PCR using the following thermal cycling condition

Stage	Temperature	Time	Number of Cycles
Initial Denaturation	95°C	1 min	1
Denaturation	95°C	20 sec	30-35
Annealing	55°C	15 sec	
Extension	72°C	15 sec	
Final Extension	72°C	2 min	1

## Quality Control

The absence of endodeoxyribonucleases, exodeoxyribonucleases and ribonucleases is confirmed by appropriate quality tests. Functionally tested in amplification of a single-copy gene from human genomic DNA.

## Product Use Limitations

*This product is sold exclusively for research purposes and in vitro use. Neither the product, nor any individual components, was tested for use in diagnostic applications or for drug development, nor is it suitable for administration to humans or animals. Please refer to the MSDS, available upon request.*