

HB220429

## 2×Hieff™ PCR Master Mix (No Dye)

### Product Information

Product name	Cat#	Size
2×Hieff™ PCR Master Mix (No Dye)	10103ES03	1 mL
	10103ES08	5×1 mL
	10103ES50	50×1 mL
	10103ES60	100×1 mL

### Product Description

2×Hieff™ PCR Master Mix is a kind of conventional PCR premixed solution which is ready to use, including Hieff™ Taq DNA Polymerase (Cat#10101), dNTP mix, MgCl<sub>2</sub> and optimized buffer. During the reaction, only the primer and template can be added for amplification, which greatly simplifies the operation steps of experiment.

The product contains bromophenol blue dye, PCR products can be directly electrophoresis. This product contains excellent stabilizers and can be stored for 3 months at 4°C. The PCR product have 3'-dA protrusion and can be easily cloned into T vector.

### Reaction System (50 μL)

Components	Size (μL)
Template DNA	suitable
Primer 1 (10 μmol/L)	2
Primer 2 (10 μmol/L)	2
2×Hieff™ PCR Master Mix	25
H <sub>2</sub> O	to 50

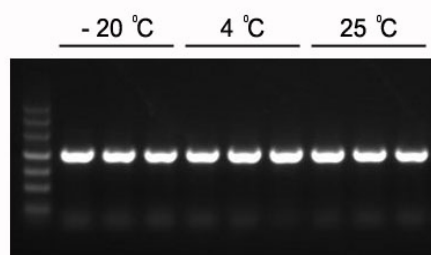
### Amplification Program

Cycle step	Temperature	Time	Cycle
Initial denaturation	94°C	5 min	1
Denaturation	94°C	30 sec	35
Annealing	50-60°C	30 sec	
Extension	72°C	30-60 sec/kb	
Final extension	72°C	10 min	1

[Note]: Be sure to mix thoroughly before use

- Template usage:** Genomic DNA:50-200 ng; plasmid DNA: 0.1-10 ng.
- Mg<sup>2+</sup> concentration:** This product contains 3 mmol/L MgCl<sub>2</sub>, suitable for most PCR reactions.
- Annealing temperature:** Please refer to the theoretical T<sub>m</sub> value of primers, the annealing temperature can be set to 2-5°C lower than the theoretical value of the primer.
- Extended time:** The extended time for molecular identification is recommended at 30 secs/kb. The extended time for gene cloning is recommended at 60 secs/kb to ensure maximum production.

### Application Example



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Figure 1. a 1.2 kb fragment amplified by 2×Hieff™ PCR Master Mix. The product can amplify expected fragment after stored at -20°C for 1 year, 4°C for 3 months, 2°C for one month respectively. Template: Arabidopsis genome; Annealing temperature:60°C; Extension time: 40 sec.

### **Shipping and Storage**

The product is shipped with ice packs and can be stored at -20°C for 2 years.

### **Cautions**

1. PCR products of this product are not suitable for polyacrylamide gel electrophoresis. If necessary, please choose our products (Cat# 10101)
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. This product is for research use **ONLY!**