

# Multi HS Prime Taq Premix

## (2X, for Multiplex PCR)

Product Name	Cat. No.	Size
	MH-7100	1.0 ml X 1
Multi HS Prime Taq Premix (2X)	MH-7101	1.0 ml X 3
Premix (2A)	MH-7102	1.0 ml X 5
Multi HS Prime Taq Premix (2X, 8-strip)	MH-7200	96 tube X 1
	MH-7201	96 tube X 3
	MH-7202	96 tube X 5

#### Package information

MH-7100	2X Multi HS Prime Taq Premix (1.0 ml X 1) - with HS Prime Taq DNA Polymerase, dNTPs mix., reaction buffer, enzyme stabilizer and loading dye
MH-7200	2X Multi HS Prime Taq Premix 10 ℓℓ in 0.2ml 8-strip PCR tube (96 tube X 1) - with HS Prime Taq DNA Polymerase, dNTPs mix., reaction buffer, enzyme stabilizer and loading dye

#### Description

The Multi HS Prime Taq Premix is for multiplex PCR. This product contains a master mix whose composition and elements were specifically developed for multiplex PCR applications.

This product contains optimized concentrations of Hot-start Tag DNA Polymerase (HS Prime Tag DNA Polymerase, G-7000), dNTPs mixture, MgCl<sub>2</sub> and reaction buffer.

Multiplex PCR is a powerful technique that enables amplification of two or more products in parallel in a single reaction tube.

It is widely used in genotyping applications and different areas of DNA testing in research, forensic, and diagnostic laboratories.

### **Applications**

- Genotyping applications (e.g., STR, VNTP analysis)
- Detection of pathogens/diagnostics
- Qualitative and semi-quantitative gene expression analysis

#### **Protocol**

The following 20 µl reaction volume can be used for PCR.

1. Prepare the following components to a PCR tube.

Components	Volume	
DW	add up to 20 $\mu$ l	
Multi HS Prime Taq Premix (2X)	10 <i>μ</i> ℓ	
Upstream Primer (10 pmoles/μl)	0.5~2.0 <i>µ</i> l	
Downstream Primer (10 pmoles/யி)	0.5~2.0 <i>µ</i> l	
Template DNA <sup>*</sup>	×μl	

\* Amount of template DNA: 10 ng ~ 250 ng

2. PCR cycling

Step	3-step PCR		Cycles
Step	Temp.	Time	Cycles
Initial denaturation	95℃	10 min	1
Denaturation Annealing Extension	95°C x°C 72°C	30 sec 30~60 sec 1 min	30~40
Final Extension	72℃	5 min	1

- 3. Separate the PCR products by agarose gel electrophoresis and visualize with EtBr or any other means.
- ▶ A DNA fragment which is amplified by Multi HS Prime Tag Premix has A overhang, and it enables you to do cloning by using T-vector.

#### Performance of Multi HS Prime Tag Premix

В

A: Multi HS Prime Taq Premix

B: Normal Taq premix

Research Use Only