

# Multi HS Prime Taq Premix with UDG (2X, for Multiplex PCR)

Product Name	Cat. No.	Size
Multi HS Prime Taq Premix <b>with UDG</b> (2X)	UMH-7100	1.0 ml X 1
	UMH-7101	1.0 ml X 3
	UMH-7102	1.0 ml X 5
Multi HS Prime Taq Premix <b>with UDG</b> (2X, 8-strip)	UMH-7200	96 tube X 1
	UMH-7201	96 tube X 3
	UMH-7202	96 tube X 5

## Package information

UMH-7100	2X Multi HS Prime Taq Premix with UDG (1.0 ml X 1) - with HS Prime Taq DNA Polymerase, UDG (Uracil-DNA Glycosylase), dNTPs mix., reaction buffer, enzyme stabilizer and loading dye
UMH-7200	2X Multi HS Prime Taq Premix with UDG 10 $\mu$ l in 0.2ml 8-strip PCR tube (96 tube X 1) - with HS Prime Taq DNA Polymerase, UDG (Uracil-DNA Glycosylase), dNTPs mix., reaction buffer, enzyme stabilizer and loading dye

## Description

The Multi HS Prime Taq Premix with UDG contains uracil-DNA glycosylase, dATP, dCTP, dGTP, dTTP and dUTP.

UDG efficiently remove uracil from single-stranded or double-stranded DNA.

Also this product contains a master mix whose composition and elements were specifically developed for multiplex PCR applications.

And this product contains optimized concentrations of Hot-start Taq DNA Polymerase (HS Prime Taq 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 $\mu$ l 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 with UDG (2X)	10 $\mu$ l
Upstream Primer (10 pmole/ $\mu$ l)	0.5~2.0 $\mu$ l
Downstream Primer (10 pmole/ $\mu$ l)	0.5~2.0 $\mu$ l
Template DNA*	x $\mu$ l

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

2. PCR cycling

Step	3-step PCR		Cycles
	Temp.	Time	
UDG activation	50 $^{\circ}$ C	3 min	1
Initial denaturation	95 $^{\circ}$ C	10 min	1
Denaturation Annealing Extension	95 $^{\circ}$ C x $^{\circ}$ C 72 $^{\circ}$ C	30 sec 30~60 sec 1 min	30~40
Final Extension	72 $^{\circ}$ C	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 Taq Premix has A overhang, and it enables you to do cloning by using T-vector.

■ Research Use Only

■ Store at -20 $^{\circ}$ C