

## Lot No.

## Description

- LaboPass™ IP pro-Taq PCR Mastermix is a 2x concentrated, ready to use reaction mixture containing optimized amount of IP pro-Taq Polymerase, dNTPs, reaction buffer, loading dye and stabilizers. This mixture is designed for ease of use, greater reproducibility and time savings. The user simply adds template DNA, primers, and DW to start the reaction.
- LaboPass™ IP pro-Taq DNA Polymerase is a modified version of Taq polymerase which improves the reliability and specificity of PCR reaction. The IP pro-Taq Polymerase has proofreading activity and is more thermostable than wild type Taq DNA polymerase, which allows for the amplification of long length up to 20 kb with high accuracy. The amplified products contain a mixture of blunt ends and 3' A-plus ends.

## Specifications

Components	IP pro-Taq Polymerase, dNTPs, reaction buffer, loading dye stabilizers
Type	Ready-to-use (Only DNA template and primers are needed)
Reaction volume	20~100 µl (PCR Mastermix is a 2x concentrated)

Store at -20°C

## Storage and Stability

LaboPass™ PCR Mastermix is stable for 1 year when stored at -20°C.

## Applications

- General PCR for detection template
- Long range PCR
- TA-cloning

## Quality Control

Each lot of IP pro-Taq polymerase, reaction buffer and dNTPs is tested for contamination such as *E.coli* genomic DNA, nicking, endonuclease and exonuclease.

## Standard Reaction

Components	Volumes (µl)
2X IP pro-Taq PCR Mastermix	10 µl
Forward Primer (10~50 pmoles/µl)	1 µl
Reverse Primer (10~50 pmoles/µl)	1 µl
DNA Template (Variable*)	1~2 µl
Distilled water	6~7 µl
<b>Total reaction volume</b>	<b>20 µl</b>

### \* Amount of DNA template

- Eukaryotic genomic DNA 10-200 ng
- Prokaryotic genomic DNA 1-50 ng
- Purified homogeneous DNA <5 ng  
(e.g. plasmid, lambda DNA, etc)
- cDNA : 0.5-10% of RT reaction volume

## General Thermo-Cycler protocol

Step	Time	Temperature
Initial denaturation	1-5 min	94-95°C
25-35 Cycles:		
Denaturation	10-25 sec	94-95°C
Annealing	10-25 sec	45-70°C
Extension	60 sec/1 kb	68-72°C
Final extension	5 min	68-72°C

### \* Note

- Vortex all solutions and spin down carefully before using
- Dispense on ice and spin down again