

# 2X Taq PCR Master Mix

## Description:

2X Taq Premix contains Taq DNA polymerase, reaction buffer, dNTPs mixture, protein stabilizer. It is optimized for user convenience by adding pcr product and dye for electrophoresis. 2X Taq Premix shows no loss of activity compared with Taq DNA Polymerase, even at room temperature. 2X Taq Premix is perfect for under 3 Kb of PCR products.

## Features:

- Convenience to use and optimization
- 2mM final MgCl<sub>2</sub> concentration

## General Reaction Protocol:

1. Thaw 2X Taq Premix.
2. Prepare a master mix as follows:

Component	Volume	Final conc.
2X Taq Premix	10 µL	1X
Forward Primer (10 pmol/ µL)	1 µL	0.5 pmoles/µL
Reverse Primer (10 pmol/ µL)	1 µL	0.5 pmoles/µL
Template DNA	Variable	10 fg to 1 µg
PCR grade water	Up to 20µL final volume	-
<b>Total Volume</b>	<b>20 µL</b>	-

3. Mix the master mix and dispense appropriate volumes into PCR tubes. Centrifuge for 10 seconds.
4. Perform PCR using your standard parameters (3-step cycling).
5. Separate the PCR products by agarose gel electrophoresis and visualize with Green Viewer Dye.

## Contents:

	NP040108100	NP040108500	NP040108102	NP040108252	NP040108502
Components	100 reactions	500 reactions	1000 reactions	2500 reactions	5000 reactions
2X Taq PCR Master Mix	1 mL	5 mL	10 mL	25 mL	50 mL

## Amplification Protocol:

Cycle	Time	Temp °C
1	4 min	95
30-35	30 sec	94
	30 sec	57
	30-60 sec	72
1	5 min	72

Thermal cycler could be set as above table.

Use an extension time of approximately 1 min. per Kb DNA for PCR products longer than 3~4 Kb.

## Agarose Gel Electrophoresis:

Run 5-7 µL of PCR products along with 3µL DNA marker on 2% agarose gel containing Green Viewer Dye DNA safe stain.

- \* A DNA fragment which is amplified by Taq DNA Polymerase has A-overhang, and it enables you to do cloning by using T-vector.

## Kit Storage:

This kit should be stored at -20 °C. Repeated freeze/thawing should be avoided. Reagents are stable for two years from the date of production.