

## 2X Taq Master Mix

Cat. No: FPLF007.1000

Store at -20 °C

### Contents:

Components	Volume
2X Taq Master Mix	1 ml

### Description:

2X Taq master mix contains Taq DNA polymerase, reaction buffer, dNTPs mixture, protein stabilizer, and optimizes the convenience to use by adding sediment for electrophoresis and 2X solution of loading dye. In general, 2X Taq master mix shows no decline of activity compare with Taq DNA Polymerase, even in a room temperature. 2X Taq master mix is good for under 3 Kb of PCR products.

### Kit storage:

This kit should be stored at -20 °C. Unnecessary repeated freeze/thawing should be avoided. Under this condition reagents are stable for two years from the date of production.

### Features:

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

### Protocol:

- 1) Thaw 2X Taq master mix.

- 2) Prepare a master mix as following table:

Component	Volume	Final Conc.
2X Taq master mix	10 µl	1X
Upstream Primer (10 pmol/ µL)	1 µl	0.5 pmoles/µl
Downstream Primer (10 pmol/ µL)	1 µl	0.5 pmoles/µl
Template DNA	Variable	10 fg~1 µg
PCR grade water	Variable	-
<b>Total Volume</b>	<b>20µl</b>	<b>-</b>

- 3) Mix the master mix and dispense appropriate volumes into PCR tubes. Centrifuge the reactions in a microcentrifuge 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.

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

### Amplification protocol:

Thermal cycler could be adjusted as example table. For PCR products longer than 3~4 Kb, use an extension time of approximately 1 min. per Kb DNA.

### Agarose gel Electrophoresis:

Run the total 5-7 µL of PCR products alongside 3µL DNA marker on a 2% agarose; gel containing Green viewer 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.

### Disclaimers and Addresses:

This product is for **Research use only** and should only be used by trained professionals.