



2×Taq PCR Master Mix Product Information

Overview:

2×Taq PCR Master Mix is an optimal 2× concentrated solution of Taq DNA polymerase, dNTPs, MgCl₂ and all other components required for PCR, except DNA template and primers. This is a premixed, ready-to-use solution with high sensitivity and specificity. The PCR products generated using this product contain dA overhangs at the 3'-end, and can be ligated to dT/-overhang vectors easily.

Product Components:

2×Taq PCR Buffer
0.2 U/μl Taq DNA Polymerase
0.6 mM each dNTPs
6 mM MgCl ₂
PCR enhancer

Applications:

Routine PCR with high reproducibility

TA cloning for short fragment

Storage & Stability:

Product may be stored for one month at 4 °C or 12 months at -20 °C.

Protocol:

1. Thaw the 2×Taq PCR Master Mix at room temperature. Vortex and spin it briefly in a microcentrifuge to collect the material in the bottom of the tube.
2. Place a PCR tube on ice and add the following components for each reaction:

2× Taq PCR Master Mix	25 μl
Forward primer (10 μM)	1 μl
Reverse primer 2(10 μM)	1 μl
Template DNA	*
ddH ₂ O	To 50 μl

*Template DNA final concentration should be no more than 10 ng/μl

Note: prepare the reaction with high precision and accuracy pipette

3. Gently vortex the samples and spin down.
4. Perform PCR with a thermal cycler containing a heated lid using the recommended thermal cycling conditions outlined below:

Temperature/Step	Time	Number of cycles
95 °C Initial Denaturation	2 min	1 cycles
95 °C Denaturation	30 sec	30~35 cycles
55 °C Annealing※	30 sec	
72 °C Extension△	1 min	
72 °C Final Extension	5 min	1 cycles

※Approximately 5 °C below T_m of primers

△Use an extension time of approximately 1 min/kb DNA

5. After amplification, samples can be used for agarose gel electrophoresis or be stored overnight at 2-8 °C and -20 °C for longer storage.