



Taq 2X PCR MasterMix

Cat. No. G888

Store at -20°C.

Product Description

Taq 2X PCR MasterMix is a ready-to-use MasterMix containing Taq DNA Polymerase in a uniquely-formulated buffer with gel loading dye. Taq has 5'-3' polymerase and 5'-3' exonuclease activities, lacks 3'-5' exonuclease activity, and produces 3'-dA-tailed amplicons. PCR products made with Taq can be used with TA cloning vectors.

Product Component	Quantity	Cat. No.
Taq 2X PCR MasterMix ¹	400 rxn (10.0 ml)	G888

¹Buffer contains 1.5 mM Mg²⁺.

Protocol

1. Mix individual components before use and assemble reaction on ice.

Component	Volume
Taq 2X PCR MasterMix	25 µl
Forward Primer (10 µM)	1-2 µl
Reverse Primer (10 µM)	1-2 µl
Template DNA	Variable (200 ng genomic DNA)
Nuclease-free H ₂ O	Up to 50 µl

2. Gently mix the reaction components and briefly centrifuge. Run thermocycling conditions for standard PCR:

Step	Temperature	Duration
Initial Denaturation ²	94°C	3 min
25 – 35 Cycles	94°C	30 sec
	50-65°C ³	30 sec
	72°C	1 min/kb
Final Extension	72°C	5 min

² For most applications, an initial 3 minute denaturation step at 94°C is sufficient. Increase to 5 minutes for high-GC or difficult templates.

³ Adjust annealing temperature based on the primer melting temperature.

General Notes

- For difficult or high-GC templates, use a standard touchdown program.
- If working with low template and/or low sample amount, reduce total reaction volume to 25 µl and lower other component volumes accordingly.