



2X PCR SuperMix

4 MAR 2024

Catalog Number	Size	Concentration
MB200-P100	100 reactions (2 x 1.25ml)	2X

Storage Conditions

Stable for up to 3 months at 4°C.

Stable for up to 24 months at -20°C.

Description

Bio-Helix 2X PCR SuperMix is a blended solution with Mg^{2+} , dNTPs, and recombinant Thermostable DNA polymerase which offers a reliable amplification of nucleic acid templates through the polymerase chain reaction (PCR). This mixture (supplied at 2X), allows the effortless calculation of its final concentration by adding the primer and template to the solution. The provided amount is sufficient for 100 amplification reactions (50 μ L each). The 2X PCR SuperMix is stable under temperature change and the enzyme maintains the same performance even when stored at 37°C after 21 days.

Kit Content(s)

2X PCR SuperMix	2 × 1.25 ml
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Required materials but not provided

- A compatible PCR instrument
- Vortex or equivalent
- Microcentrifuge
- Plates and seals for your instruments

Instrument Compatibility

This Super Mix is compatible with the majority of commercially available PCR systems.

Reaction Setup

As a starting point, please place the pre-chilled components on ice and follow the below steps:

1. Set up the reaction tubes/plates on ice
2. Add the following components (in any order) to the reaction vessel:
 - 2X PCR SuperMix (25 μ l)
 - Primers (200 nM final concentration per primer is recommended)
 - DNA template



3. Mix the components and if necessary, cover them with mineral or silicone oil
4. Cap reaction tubes and load them into the thermal cycler.
5. Run cycling program. Process in the thermal cycler for 25~35 cycles as follows:

Initial Denaturation	2~5 minutes at 94°C
Denaturation	20~40 seconds at 94°C
Annealing	1 min at the proper annealing temperature
Extension	2 min at 72°C
Final extension	5 min at 72°C



Note: Optimization may be needed for better performance.

Important notes

1. Shake gently before use to avoid foaming and low-speed centrifugation.
2. During operation, always wear a lab coat, disposable gloves, and protective equipment.