

OmniPCR Supermix w Fluorescent dye

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Catalog Number	Size	Concentration
MBA01-0100	100 reactions (2 x 1.25ml)	2X

Storage Conditions

Stable for up to 6 months at 4°C.

Stable for up to 24 months at -20°C.

Note: OmniPCR Supermix is light sensitive and should be stored and protected from light.

Description

OmniPCR Supermix w Fluorescent dye is a ready-to-use combined solution containing the Thermostable DNA polymerase, PCR buffer, dNTPs, gel loading dyes, enhancer, and fluorescence dye. Directly add primers, template, and water to execute the polymerase chain reaction (PCR). The Taq DNA polymerase exhibits 5'-exonuclease activity and after carrying DNA electrophoresis, the OmniPCR Supermix w Fluorescent dye is directly detected on BluPAD LED transilluminator or other compatible transilluminator. The supermix is provided at 2X concentration and used at 1X concentration for the addition of primer and template solutions. Reagents are provided with the sufficient amplification reactions of 50 µl each, 100 reactions per kit.

Kit Content(s)

OmniPCR Supermix w Fluorescent dye	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:

Standard PCR with OmniPCR Supermix w Fluorescent dye:

- For each 50 µl reaction, assemble the following components in a 0.2 ml PCR tube on ice just prior to use:

OmniPCR Supermix w Fluorescent dye	25 µl
Forward primer, 5~10 uM	Variable
Reverse primer, 5~10 uM	Variable
DNA template	Variable
Add ddH ₂ O to	50 µl

Mix gently. If necessary, centrifuge briefly. Cap tubes and place in the thermal cycler.

- 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.

- After the PCR reaction, perform agarose electrophoresis to detect PCR product. No additional dye is required for the PCR samples. Gels can be post-stained with Ethidium Bromide if desired.
- Use the blue-light or UV transilluminator to photograph the gel.

Important notes

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Removal of fluorescence dye

- Submerge the PCR product containing the fluorescence dye into the 100 mM NaCl and add 2.5 volumes of absolute or 95% ethanol.
- Incubate on ice for 20 minutes.
- Centrifuge the mixture at 4°C for at least 10 minutes.
- Remove the suspension of ethanol and wash the pellet with 1ml of 70% ethanol.
- Dry the residual ethanol and resuspend the double-stranded DNA in the TE.