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## 2X Taq PCR Master Mix

**Catalog# GF1030**

**Description:** The 2x Taq PCR master mix is a pre-mixed 2x solution of Taq DNA polymerase, PCR reaction buffer, dNTPs, MgCl<sub>2</sub>, PCR enhancers and gel loading dye. The master mix contains all the necessary components for PCR amplification except template DNA and primers. This PCR master mix has been optimized for high-efficiency PCR amplification, and is ideal for routine PCR such as genotyping PCR. A vivid colored gel loading dye is also included in this mix, just directly load 2-10µl of PCR product onto the gel.

**Features:** All-in-one master mix minimizes the steps in setting up PCR reactions.  
Vivid color facilitates visualizing when setting up multiple reactions in a 96-well plate.  
Gel loading dye included, direct gel loading after your PCR reaction.

**Storage:** For long term storage, keep at -80°C or -20°C. For short term storage, store at 4°C. The master mix is stable at 4°C for at least two months or for seventeen freeze-thaws cycles.

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### PCR Protocol

1. To setup a 50µl PCR reaction, add the following components into a DNase-Free thin-wall PCR tube:

Components	Volume	Final Concentration
2X PCR Master Mix	25 µl	1X
DNA Template	1~100 ng	0.02~2 ng/µl
Forward Primer (10 µM)	1µl	0.2µM
Reverse Primer (10 µM)	1 µl	0.2µM
ddH <sub>2</sub> O	to 50 µl	

2. Gently mix the components by pipetting up and down several times, avoiding bubbles.
3. Briefly spin down the components in the PCR tubes.
4. Set up the program for a regular PCR as follows:
  - Template denature before cycling: 94°C, 3minutes
  - 30-40 cycles:
    - 94°C, 20-30 seconds
    - 42-65°C, 15-30 sec
    - 68-72°C, 1min/kb
  - Extension: 72°C, 5-10 minutes
  - Hold at: 4°C
5. The PCR products can be directly loaded into agarose gel for analysis.

**For Research Use Only**