

# 2X Taq PreMix (Master Mix)

Cat: C101081 (100 Reactions, 1ml) Cat: C101082 (500 Reactions, 5 x 1ml) Store at -20 °C

#### Contents:

| Component          | C101081 | C101082 |
|--------------------|---------|---------|
| 2x Taq PreMix (2x) | 1ml     | 5x 1ml  |

### Description:

2X Taq Premix contains **Pars Tous** Taq DNA polymerase, reaction buffer, dNTPs mixture, protein stabilizer, and optimizes the convenience to use by adding sediment for electrophoresis and 2X solution of loading dye. In general, 2X Taq Premix shows no decline of activity compare with Taq DNA Polymerase, even in a room temperature. 2X Taq Premix is good for under 3 Kb of PCR products.

#### Kit storage:

This kit should be stored at -20 °C. Unnecessary repeated freeze/thawing should be avoided. Under these conditions reagents are stable for two years from the date of production.

#### Features:

- Convenience to use and optimization
- 2mM final MgCl<sub>2</sub> concentration

# **General Reaction Protocol:**

1. Thaw 2X Taq Premix.

2. Prepare a master mix as following table.

| Component         | Volume   | Final conc. |
|-------------------|----------|-------------|
| 2X Taq Premix     | 10 μL    | 1X          |
| Upstream Primer   | 1 μL     | 0.5         |
| (10 pmol/ μL)     |          | pmoles/µL   |
| Downstream Primer | 11       | 0.5         |
| (10 pmol/ μL)     | 1 μL     | pmoles/µL   |
| Template DNA      | Variable | 10 fg~1 μg  |
| PCR grade water   | Variable | -           |
| Total Volume      | 20 µL    | -           |

3. Mix the master mix and dispense appropriate volumes into PCR tubes. Centrifuge the reactions in a microcentrifuge for 10 seconds.

4. Perform PCR using your standard parameters (3-step cycling).

5. Separate the PCR products by agarose gel electrophoresis and visualize with Green viewer.

| Cycle | Time      | Temp °C |
|-------|-----------|---------|
| 1     | 4 min     | 95      |
|       | 30 sec    | 94      |
| 30-35 | 30 sec    | 57      |
|       | 30-60 sec | 72      |
| 1     | 5 min     | 72      |

## Amplification protocol:

Thermal cycler could be adjusted as example table. For PCR products longer than 3~4 Kb, use an extension time of approximately 1 min. per Kb DNA.

#### Agarose gel Electrophoresis:

Run the total 5-7  $\mu L$  of PCR products alongside  $3\mu L$  DNA marker on a 2% agarose; gel containing Green viewer DNA safe stain.

\* A DNA fragment which is amplified by Taq DNA Polymerase has A-overhang, and it enables you to do cloning by using T-vector.

#### **Disclaimers and Addresses**

This product is for **Research Use Only** and should only be used by trained professionals.

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