

## Universal 2.5X PCR-PREMIUM for PCR (Mg final Conc. 4 mM) (100rxns)

Cat No.110118

### DATA-SHEET

Ready to use pre-mixes are the innovation for convenience of your routine PCR as you just have to add your template DNA besides your primers & put the tubes for amplifications. These pre-mixes are optimized for most of the PCR templates. However amplifications may vary for different templates, hence Mg Concentration needs to be adjusted for further optimization.

2.5X PCR PRE-MIX is an optimized, ready to use PCR mixture of *Taq* DNA Polymerase, PCR buffer, MgCl<sub>2</sub> and dNTP's. This 2.5X PCR pre-mix contains all components for PCR, except DNA template and primers. The mixture is suitable for amplification of most of the DNA templates. In case of difficult templates please use **Universal Hot Start Premix**.

#### CONTENTS OF THE PACK :

|                           |  |
|---------------------------|--|
| Universal 2.5X PCR-Premix | 1.0 ml x 2 (for 100 reactions of 50µl) |
| Mol. Grade water          | 1.0 ml - 1 Vial                        |

**NOTE:** It is not advisable to Freeze thaw the premix time & again. If the premix is to be used in several batches then it is advisable to prepare aliquots & store at -20 °C.

**Mol grade water :** Water is supplied in 1.0 ml quantity, which is RNAse and DNAse free. Advisable to aliquot the Mol. Grade water.

**SPECIFICATIONS :** Supplied as 2.5X in liquid form so as to ensure that you can add your primers & Template DNA volumes, to desired levels.

**Storage Conditions :** Recommended storage temperature is -20 °C.

#### DILUTION PROTOCOL for PCR :

| Component               | 50 µl reaction Volume |             | 25 µl reaction volume |             |
|-------------------------|-----------------------|-------------|-----------------------|-------------|
|                         | Volume                | Final Conc. | Volume                | Final Conc. |
| 2.5 X PCR Premix        | 20 µl                 | 1 X         | 10 µl                 | 1 X         |
| Forward primer          | Variable              | 0.1-1 µM    | Variable              | 0.1-1 µM    |
| Reverse Primer          | Variable              | 0.1-1 µM    | Variable              | 0.1-1 µM    |
| Template DNA            | Variable              | 10pg-1 µg   | Variable              | 10pg-1 µg   |
| Sterile Deionized water | Up to 50 µl           | ----        | Up to 25 µl           | ----        |

-- It is advisable to use 20µl - 25µl of extracted template DNA in case low yield is expected for 50µl reaction volumes. In case of High yields the volumes can be adjusted as per the yield of DNA.

#### Suggested cycling protocol :

|                      |                |           |               |
|----------------------|----------------|-----------|---------------|
| Initial Denaturation | 95°C           | 5 minutes |               |
| Cycling              | 95°C           | 20 secs   | 40 –45 cycles |
|                      | Annealing      | 30 secs   |               |
|                      | 72°C extension | 30 secs   |               |
| Final Extension      | 72°C           | 5 minutes |               |

Manufactured and Marketed By :

**GENOME DIAGNOSTICS PVT. LTD.,**  
(An ISO 13485:2003 & ISO 9001:2000 Certified Company)

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**Packing :** The above PCR premix is available in convenient small packs as well as large packs for bulk users.

The pre-mix is supplied with an additional vial of DNase free water. Also Pre-mixes with various concentrations of MgCl<sub>2</sub> are available as mentioned below. Generally 2.5mM Pre-mix is considered as universal.

**Pack size available :**

| Cat. No. | Product   | Pack Size                |
|----------|---|--------------------------|
| 110110   | <b>2.5 X PCR-Premix:</b><br>50 reactions of 50µl or 100 reactions of 25µl 1.5 mM final Mg at 1 X Conc.  | 1ml x 1 (50 rxns 50µl)   |
| 110111   | <b>2.5 X PCR-Premix:</b><br>100 reactions of 50µl or 200 reactions of 25µl 1.5 mM final Mg at 1 X Conc. | 1ml x 2 (100 rxns 50µl)  |
| 110112   | <b>2.5 X PCR-Premix:</b><br>50 reactions of 50µl or 100 reactions of 25µl 2.5 mM final Mg at 1 X Conc.  | 1ml (50 rxns 50µl)       |
| 110113   | <b>2.5 X PCR-Premix:</b><br>100 reactions of 50µl or 200 reactions of 25µl 2.5 mM final Mg at 1 X Conc. | 1ml x 2 (100 rxns 50µl)  |
| 110114   | <b>2.5 X PCR-Premix:</b><br>500 rxns of 50µl or 1000 reactions of 25µl 2.5 mM final Mg at 1 X Conc.     | 1ml x 10 (500 rxns 50µl) |
| 110115   | <b>2.5 X PCR-Premix:</b><br>50 reactions of 50µl or 100 reactions of 25µl 3.5 mM final Mg at 1 X Conc.  | 1ml (50 rxns 50µl)       |
| 110116   | <b>2.5 X PCR-Premix:</b><br>100 reactions of 50µl or 200 reactions of 25µl 3.5 mM final Mg at 1 X Conc. | 1ml x 2 (100 rxns 50µl)  |
| 110117   | <b>2.5 X PCR-Premix:</b><br>50 reactions of 50µl or 100 reactions of 25µl 4 mM final Mg at 1 X Conc.    | 1ml (50 rxns 50µl)       |
| 110118   | <b>2.5 X PCR-Premix:</b><br>100 reactions of 50µl or 200 reactions of 25µl 4 mM final Mg at 1 X Conc.   | 1ml x 2 (100 rxns 50µl)  |
| 110119   | <b>2.5 X PCR-Premix:</b><br>100 reactions of 50µl or 200 reactions of 25µl 5 mM final Mg at 1 X Conc.   | 1ml x 2 (100 rxns 50µl)  |

**NOTE :** For research use only. Not for use in Diagnostic or therapeutic procedures.

Genome Diagnostics Pvt. Ltd., shall not in any event be liable for incidental or special damage of any kind resulting from any use except on applications.



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