



## 5x HOT FIREPol® Blend Master Mix Ready to Load

with 7.5 mM MgCl<sub>2</sub>

Cat. No.

Lot. No.

Dispense No.

Expiry date

### Description:

5x HOT FIREPol® Blend Master Mix Ready to Load is a premixed ready-to-use solution containing all reagents required for PCR (except template, primers and water), additional compound needed for direct loading onto agarose gel and two tracking dyes (blue and yellow) that allow to monitor progress during electrophoresis.

HOT FIREPol® Blend Master Mix Ready to Load contains two carefully optimized enzymes – HOT FIREPol® DNA polymerase and a proofreading polymerase. This enzyme blend has both the 5'→3' exonuclease activity as well as the 3'→5' proofreading activity. HOT FIREPol® Blend Master Mix Ready to Load exhibits an increased fidelity (up to five fold) compared to HOT FIREPol®.

### Mix Composition:

- **HOT FIREPol® DNA polymerase**
- **Proofreading enzyme**
- **5x Blend Master Mix Buffer**
- **7.5 mM MgCl<sub>2</sub>**  
*1x PCR solution – 1.5 mM MgCl<sub>2</sub>*
- **2 mM dNTPs of each**  
*1x PCR solution – 200 μM dATP, 200 μM dCTP, 200 μM dGTP and 200 μM dTTP*
- **BSA**
- **Blue dye**  
*Migration equivalent to 3.5-4.5 kb DNA fragment*
- **Yellow dye**  
*Migration equivalent to <35-45 bp DNA fragment*
- **Compound that increases sample density for direct loading**

### Shipping and Storage conditions:

Routine storage: -20°C

Shipping and temporary storage for up to 1 month at room temperature or storage for up to 6 months at 2-8°C has no detrimental effects on the quality of 5x HOT FIREPol® Blend Master Mix Ready to Load.

### Quality Control:

Assay	Result
Amplification efficiency	≥10 <sup>5</sup> fold
PCR reproducibility	passed
ds Endodeoxyribonuclease activity	no
ss Exodeoxyribonuclease activity	no
Self-priming activity	no

### Safety warnings and precautions:

This product and its components should be handled only by persons trained in laboratory techniques. It is advisable to wear suitable protective clothing, such as laboratory overalls, gloves and safety glasses. Care should be taken to avoid contact with skin or eyes. In case of contact with skin or eyes, wash immediately with water.

*Some applications this product is used in may require a license which is not provided by the purchase of this product. Users should obtain the license if required.*

**FOR RESEARCH USE ONLY**

**APPROVED BY:**

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