



## HOT FIREPol<sup>®</sup> DNA Polymerase

Cat. No.

Lot. No.

Dispense No.

Expiry date

### Description:

HOT FIREPol<sup>®</sup> DNA Polymerase is a chemically modified FIREPol<sup>®</sup> DNA Polymerase. At ambient temperatures it is inactive, having no polymerization activity. HOT FIREPol<sup>®</sup> DNA Polymerase is activated by a 15 min incubation step at 95°C. This prevents extension of non-specifically annealed primers and primer-dimers formed at low temperatures during PCR setup. The enzyme has 5' → 3' polymerization-dependent exonuclease replacement activity but lacks 3' → 5' exonuclease activity.

### Reagents provided:

- **HOT FIREPol<sup>®</sup> DNA Polymerase**
- **HOT FIREPol<sup>®</sup> 10x Buffer B1** (Mg<sup>2+</sup> and detergent free) *Tris-HCl and (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>*
- **HOT FIREPol<sup>®</sup> 10x Buffer B2** (Mg<sup>2+</sup> free) *Tris-HCl, (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> and detergent*
- **25 mM MgCl<sub>2</sub>**
- **10x Solution S**

*Additive that facilitates amplification of difficult templates (e.g. GC-rich DNA templates). This solution should be used at a defined working concentration (1x, 2x or 3x solution).*

**Solution S is NOT a reaction buffer and should be used ONLY IF non-specific amplifications occur.**

### Concentration:

5 U/μl

### Shipping and Storage conditions:

Routine storage: -20°C

Shipping and temporary storage for up to 1 month at room temperature has no detrimental effects on the quality of HOT FIREPol<sup>®</sup> DNA Polymerase.

### 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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