

FIREPol[®] DNA Polymerase

Solis BioDyne Certificate of Analysis

Cat. No.

Lot. No.

Expiry date:

Description:

FIREPol[®] is a recombinant, highly processive and thermostable DNA polymerase. Due to its genetic modifications FIREPol[®] has an enhanced stability at room temperature with no activity loss for up to 1 month.

Reagents Provided:

- FIREPol[®] DNA Polymerase
- 10x Reaction buffer B (Mg²⁺ free)
 0.8 M Tris-HCl, 0.2 M (NH₄)₂SO₄, 0.2% w/v Tween-20
- **10x Reaction buffer BD** (Mg²⁺ and detergent free) 0.8 M Tris-HCl, 0.2 M (NH₄)₂SO₄
- 25 mM MgCl₂
- 10x Solution S

Concentration:

5 U/µl

Unit definition:

One unit is defined as the amount of the enzyme required to catalyze the incorporation of 10 nmol of dNTPs into an acid-insoluble form in 30 minutes at 74° C.

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 FIREPol[®] DNA Polymerase.

Quality Control:

Assay	Result
Amplification efficiency	≥10 ⁵
PCR reproducibility	passed
5' \rightarrow 3' exonuclease activity	yes
$3' \rightarrow 5'$ exonuclease activity	no
Deoxynucleotidyl transferase activity	yes
Ds endodeoxyribonuclease activity	no
Exodeoxyribonuclease activity	no
Extension rate	2-4 kb/min at 72°C
Self-priming activity	no
Stability at ambient temperature	passed
Multible freeze-thaw cycles	passed

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: ___