DIALAT Ltd.

Data sheet
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Pfu DNA POLYMERASE

RESEARCH USE ONLY

Recombinant Pfu DNA Polymerase

(Deoxynucleosidetriphosphate: DNA Deoxynucleosidyltransferase E.C. 2.7.7.7.)

Cat.No.	Pack	Conc.
DPF-100	**100 Units**	**5 U/μl**
DPF-500	**500 Units**	**5 U/μl**

Stability:
Shelf life 24 months if store at -20°C

Unit Definition

One unit is defined as the amount of enzyme that incorporates 10 nmoles of dNTP's into acid-insoluble form in 30 minutes at 75°C under assay conditions

Storage and Dilution Buffer:

50mM Tris-HCL (pH 8.2);0.1mM EDTA; 1mM DTT; 50% glycerol

Amplification Buffer:

200 mM Tris-HCl (pH 8.8 at 25°C), 100 mM KCl, 100 mM $(NH_4)_2SO_4$, 20 mM $MgSO_4$, 1.0% Triton X-100 and 1 mg/ml nuclease-free BSA.

SOURCE:
Pyrococcus furiosis

DESCRIPTION
Pfu DNA Polymerase is a thermostable 92 kDa DNA Polymerase purified from E.coli recombinant strain expressing ***Pyrococcus furiosis*** polymerase gene.
Pfu possesses 3' to 5' exonuclease **proofreading activity** that enables the polymerase to correct nucleotide-misincorporation errors. Application of ***Pfu*** results in blunt-ended amplification products which are ideal for further "blunt-end» cloning.

ASSOCIATED ACTIVITIES:
Endonuclease and exonuclease activities were not detectible after 2 and 1 hours incubation, respectively, of 1 μg lambda DNA and 0.22 μg of EcoR I digested lambda DNA, respectively, at 72°C in the presence of 15-20 units of ***Pfu*** DNA polymerase.

APPLICATIONS:
- High Fidelity (Hi-Fi) PCR
- Cloning
- "Hi–Fi" LD PCR

STORAGE CONDITIONS :
Store ***Pfu*** DNA Polymerase at -20°C

SHIPPING CONDITIONS:
Should be shipped at ambient temperature.
For long distance shipments preferably in **Blue Ice**

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