Product Information Sheet

ÁÌ£Á Taq DNA Polymerase

Conc: 5 U/µl Store at –20°C (non-frost-free)

Description

Taq DNA Polymerase gene is isolated from *Thermus aquaticus* YT1 and expressed in *E. coli*. The recombinant Taq DNA polymerase shows identical characteristics to native Taq from *Thermus aquaticus*. The enzyme consists of a single polypeptide with a molecular weight of approximately 94 kDa, and will synthesize DNA products having dA overhang on 3' ends.

Storage Buffer

20mM HEPES (pH7.9), 100mM KCL, 0.1mM EDTA, 0.5mM PMSF, 1mM DTT, 50% (v/v) glycerol, stabilizers.

10X PCR Buffer

100mM Tris-HCl (pH 8.4), 500mM KCl, 15mM $MgCl_2$
The PCR Buffer is supplied as a 10X concentrate and should be diluted for use.

Unit Definition

One unit incorporates 10nmol of deoxyribonucleotide into acid-precipitable material in 30 minutes at 74°C.

Quality Control

Precision Taq DNA Polymerase is highly purified and free of contaminating endonucleases, exonucleases, and nicking activity. Enzyme purity is evaluated by SDS-PAGE at >95% purity.

Reaction Conditions

Denaturation: 94°C-96°C (30sec to 4min).
Annealing: Start at 5° below T_m of primer.
Extension: 70°C-72°C (30sec to 1min./kb).

This product is registered with FDA as a Class I exempt general purpose reagent, not for human investigative or therapeutic use.