Datasheet for ABIN3188231

DNA Polymerase I Large (Klenow) Fragment

Overview

Quantity:	500 U
Application:	DNA Amplification (DNA Amp)

Product Details

Characteristics:	DNA Polymerase I Large (Klenow) Fragment is the large fragment of E. coliDNA Polymerase I (abm Cat. No. G469). The Klenow Fragment retains the DNA-dependent DNA polymerase activity of the E. coli DNA Polymerase I but lacks the 5'→3' exonuclease activity. With its inherent 3'→5' exonuclease activity, Klenow possesses the polymerization fidelity of the holoenzyme without degrading 5'-termini.
Components:	Enzyme supplied with 10X Reaction Buffer
Unit Definition:	One unit is defined as the amount of DNA Polymerase I Large (Klenow) Fragment that catalyzes the incorporation of 10 nmol of dNTP into acid insoluble material in 30 minutes at 37°C using poly(dA-dT):poly(dA-dT) as a template:primer.

Application Details

Comment:	• DNA blunting by fillingin 5'overhangs with unlabeled or labeled dNTPs • cDNA secondstrand synthesis • Generate singlestranded DNA probes using random primers • Sitedirected DNA mutagenesis using synthetic oligonucleotides • Dideoxy DNA sequencing of single or doublestranded DNA templates • 3'→5' exonuclease activity can blunt a 3'overhang
Restrictions:	For Research Use only

Handling

Concentration:	5 U/µL
Buffer:	25 mM Tris-HCl (pH 7.5), 0.1 mM EDTA, 1 mM DTT, and 50 % (v/v) Glycerol.

Handling

Storage:	-20 °C

Publications

Product cited in:	Johnson, Drugan, Miller, Evans: "38" in: , Vol. 1363, Issue Nucleic acids research, pp. 28-39, (1991)