For research use only

ISO9001

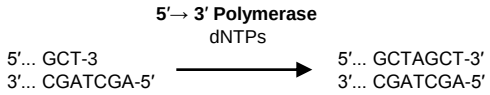
DNA Polymerase I Large (Klenow-exo) Fragment

Product	Quantity	Cat. No.	Remarks
DNA Polymerase I Large (Klenow-exo) Fragmnet	200 unit	EBT-3000	5 unit/㎕

Description

DNA Polymerase I Large (Klenow -exo) Fragment is a DNA-dependent DNA polymerase that lacks both the 5′→3′ and 3'→5' exonuclease activity of intact *E. coli* DNA Polymerase I. DNA Polymerase I Large (Klenow -exo) Fragment is used for random priming and chain displacement amplification. But it is not recommended in blunt formation for blunt-ended ligation.

DNA Polymerase I Large (Klenow -exo) Fragment is purified from a recombinant *E.coli* strain.



Concentration & Storage Condition

5 unit/ ㎕. Store at -20℃.

Storage Buffer

50 mM Tris-HCl, pH 7.5, 1 mM DTT, 0.1 mM EDTA, 50% (v/v) glycerol.

10x Reaction Buffer

500 mM Tris-HCl, pH 7.2, 100 mM $MgSO_4$, 1 mM DTT.

Unit Definition

One unit is defined as the amount of enzyme that incorporates 10nmole of total dNTP into TCA-insoluble material in 30 min at 37°C. The reaction conditions are: 67 mM potassium phosphate, pH 7.5, 6.7 mM $MgCl_2$, 1 mM DTT, 50 μg/ml activated calf thymus DNA and 33 mM each of dATP, dCTP, dGTP and dTTP (a mix of unlabeled and [^{3}H]dTTP).

QC Tests

Activity, exo and endonuclease activity test, SDS-PAGE purity, performance tests.

Usage Information

Fill-In of 5′-Overhang to form Blunt ends

1) Add the following components to the microcentrifuge tube :

DNA (1–5μg digested DNA containing 5′-overhangs)	xμl
10x Reaction Buffer	2μl
1mM dNTP mixture (0.25mM each)	5μl
DNA Polymerase I (2.5 units)	0.5μl
Nuclease-Free Water to final volume	20μl

2) Incubate at 37°C for 1 hour.
3) Heat at 75°C for 10 minutes to inactivate the enzyme.

㈜ 엘피스바이오텍
www.elpisbio.com
(302-854) 123-12 Chunglim-Dong, Seo-Gu, Taejeon, Korea
Tel: +82-42-581-8448, Fax: +82-42-581-8449