

DNA Polymerase I, Large (Klenow) Fragment

CATALOG NO:	P1597-200 200 U P1597-1000 1000 U
SEQUENCE:	Klenow Fragment (amino acids 324 - 928)
EC NUMBER:	2.7.7.7
SOURCE:	<i>E. coli</i>
MOL. WEIGHT:	67.9 kDa with N-Terminal His-Tag
FORM:	Liquid (In 50% glycerol, 50 mM Tris pH 7.4, 100 mM KCl, 1 mM DTT)
STORAGE CONDITIONS:	For long term storage, divide into aliquots and store at -20°C or -70°C for two years. Avoid repeated freezing and thawing cycles.
DESCRIPTION:	The Large, Klenow Fragment is a proteolytic product of <i>E. coli</i> DNA Polymerase I, which retains 5'→3' polymerase activity and 3'→5' exonuclease activity. It is useful for generating blunt ends by removing the 3' overhangs and filling the 5' overhangs. It can be also used to generate probes and second strand cDNA.
SPECIFIC ACTIVITY:	≥ 20,000 U/mg
UNIT DEFINITION:	One unit is defined as the amount of enzyme that will incorporate 10 nmol of dNTP into acid insoluble material in 30 minutes at 37°C.

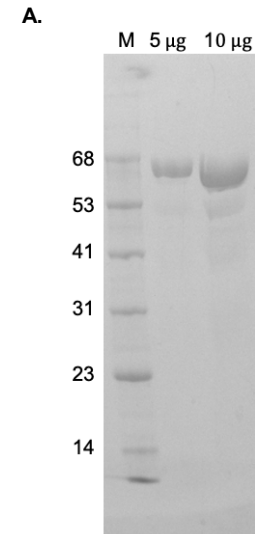


Figure A. SDS PAGE (4-20%) of Recombinant DNA Polymerase I, Large (Klenow) Fragment: The protein was loaded under reducing conditions followed by Coomassie Blue staining. **M:** Protein marker; **Lanes (2-3):** DNA Polymerase I, Large (Klenow) Fragment (5 µg & 10 µg) respectively.

RELATED PRODUCTS:

- T4 DNA Polymerase (Cat# M1211)
- *E. coli* DNA Polymerase I (Cat# M1210)
- Taq Polymerase (Cat# 9001)
- PFU DNA Polymerase (Cat# 9003)

FOR RESEARCH USE ONLY! Not to be used on humans.