

Technical Datasheet

DNA Polymerase I

(*E. coli*)

Cat No:	PM-1080-01 PM-1080-02	Pack size:	500U 2500U
Concentration:	U/ μ l	Lot No:	
Specific Activity:	U/mg	Protein Conc.:	mg/ml

Unit Definition: One unit is the amount of enzyme required incorporate 10nmol of total nucleotide into acid-insoluble material in 30 min at 37°C.

Assay Conditions: 67mM potassium phosphate (pH 7.4); 6.7mM MgCl₂; 1.0mM DTT; 0.033mM [α -³²P]dATP; 0.033mM dCTP; 0.033mM dGTP; 0.033mM dTTP & 4.5 μ g activated DNA.
Incubation is at 37°C for 30 min in a reaction volume of 100 μ l.

Storage Buffer: 50mM potassium phosphate (pH 7.0), 0.25mM DTT, & 50% glycerol.

Quality Control

Endonuclease: Incubation of 5, 10 and 20U DNA polymerase with 0.5 μ g pBR-322 DNA at 37°C for 1 hour resulted in <10% conversion of RFI to RFII DNA. Reaction volume 10 μ l.

Purity: Approximately 95% pure, as judged by SDS-polyacrylamide gel electrophoresis.

Storage: Store at -20°C.