

# rTaq (recombinant Taq) DNA Polymerase

Code No. TAP-201

Lot No. \*\*\*\*\*

Size 250units

Source : *Escherichia coli*Concentration : 5 units/ $\mu$ L

Unit Definition : One unit of enzyme is defined as the amount of enzyme that will incorporate 10 nmoles of dNTPs into acid insoluble material in 30 minutes at 75°C.

Assay Condition : 25 mM TAPS(pH9.3)  
 50 mM KCl  
 2 mM MgCl<sub>2</sub>  
 200  $\mu$ M each of dATP,dGTP,dTTP  
 100  $\mu$ M [ $\alpha$ -<sup>32</sup>P]-dCTP  
 20  $\mu$ g activated salmon sperm DNA per 50  $\mu$ L reaction

Storage Buffer : 20 mM Tris-HCl(pH8.0)  
 100 mM KCl  
 0.1 mM EDTA  
 1 mM DTT  
 0.5 % Tween-20  
 0.5 % Nonidet P-40  
 50 % Glycerol

rTaq DNA Polymerase : 500 mM KCl  
 10  $\times$  Buffer : 100 mM Tris-HCl(pH8.3 at 25°C)

Magnesium Chloride : 25 mM MgCl<sub>2</sub>(1~4mM(final concentration)are recommended)

dNTPs : 2 mM dATP,dGTP,dCTP,dTTP each

## Quality Control

1. Endonuclease Activity : When 12.5 units of this enzyme were incubated with 1  $\mu$ g of  $\lambda$ -DNA for 16 hours at 75°C, no endonuclease activity was observed after agarose gel electrophoresis.

2. Nicking Activity : When 12.5 units of this enzyme were incubated with 1  $\mu$ g of pBR322 for 16 hours at 75°C, no nicking activity was observed after agarose gel electrophoresis.

