

## KOD FX

Code No. KFX-101

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

Size 200units(101),20units(101S)

Concentration : KOD FX DNA Polymerase 1 unit/ $\mu$ L  
 anti-KOD FX DNA Polymerase antibody 1.6 mg/mL

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 : 20 mM Tris-HCl (pH7.5 at 25 °C)  
 8 mM MgCl<sub>2</sub>  
 7.5 mM DTT  
 2.5  $\mu$ g BSA  
 150  $\mu$ M each of dATP,dGTP,dCTP,dTTP(a mix of unlabeled and [<sup>3</sup>H]-dTTP)  
 7.5  $\mu$ g activated calf thymus DNA per 50 $\mu$ L reaction

Storage Buffer : 50 % Glycerol  
 50 mM Tris-HCl(pH8.0 at 25 °C)  
 0.1 mM EDTA  
 1 mM DTT  
 0.001 % Tween-20  
 0.001 % Nonidet P-40

Materials Provided 2x PCR Buffer for KOD FX  
 2mM dNTPs (2mM dATP,dGTP,dCTP,dTTP each)

## Quality Control

1.Nicking Activity : When 15units of this enzyme were incubated with 1 $\mu$ g of pBR322 for 4 hours at 75°C, no nicking activity was observed after agarose gel electrophoresis.

2.PCR Assay : The 24kbp fragment of tPA(tissue-type plasminogen activator) gene could be amplified when using 200ng human genomic DNA as the template.

This enzyme is produced as recombinant in *E.coli* and has very high amplification efficiency. Therefore, there is a possibility to amplify *E.coli* genomic DNA when using rRNA primers.



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