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Storage Conditions (−20 °C)
Shipping Conditions (−20 °C)

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KOD −Plus−

Code No. KOD−201

Lot No. ******

Size 200units

Concentration	:	KOD DNA polymerase	1.0	unit/μl
		anti−KOD 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	$MgCl_2$
7.5	mM	DTT
2.5	μg	BSA
150	μM	each of dATP,dGTP,dCTP,dTTP(a mix of unlabeled and [^{3}H]−dTTP)
7.5	μg	activated calf thymus DNA per 50 μl 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

10×PCR Buffer for KOD −Plus−
25mM $MgSO_4$
dNTPs : 2mM dATP,dGTP,dCTP,dTTP each

Quality Control

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

2. PCR Assay : The 4.0 kbp fragment of p53 gene could be amplified using 5ng human genomic DNA.

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.

manual

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