KOD DNA Polymerase

Code No. KOD-101

Lot No. ******

Storage Store at −20℃

Size 250units

Source	:	*Escherichia coli* JM109(pKOD1)		
Concentration	:	2.5 units/μl		
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℃.		
Assay Condition	:	20	mM	Tris-HCl(pH7.5 at 25℃)
		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℃)
		0.1	mM	EDTA
		1	mM	DTT
		0.1	%	Tween-20
		0.1	%	Nonidet P-40
KOD DNA Polymerase 10×PCR Buffer #1	:	60	mM	$(NH_4)_2SO_4$
		100	mM	KCl
		1.2	M	Tris-HCl(pH8.0 at 25℃)
		1	%	Triton X-100
		0.01	%	BSA
KOD DNA Polymerase 10×PCR Buffer #2	:	60	mM	$(NH_4)_2SO_4$
		100	mM	KCl
		1.2	M	Tris-HCl(pH8.8 at 25℃)
		1	%	Triton X-100
		0.01	%	BSA
Magnesium Chloride	:	25	mM	$MgCl_2$(1～4mM(final concentration)are recomended)
dNTPs	:	2	mM	dATP,dGTP,dCTP,dTTP each

Quality Control

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