Certificate of analysis

rTth DNA Polymerase

Code No. TTH-309L

Lot No. ******

Storage Store at −20°C

Size ****units

Source	:	*Escherichia coli* KP3998(pLEDNS)		
Reaction	:	DNA_{OH} + ndNTP → $DNA-(pdN)_n$ + nPPi		
Concentration	:	5 units/μl		
Unit Definition	:	One unit is the amount of enzyme that incorporates 10 nmoles of total nucleotides into acid precipitable form in 30 minutes at 75 ℃.		
Assay Condition	:	67	mM	Tris-HCl(pH8.8 at 25 ℃)
		16.6	mM	$(NH_4)_2SO_4$
		6.7	mM	$MgCl_2$
		10	mM	2-mercaptoethanol
		200	μM	each dATP,dGTP,dCTP, ^{3}H- dTTP
		20	μg/ml	ssM13mp 18 DNA
		6	μg/ml	M13 Sequencing Primer(24mer)
Storage Buffer	:	10	mM	Tris-HCl(pH7.5 at 25 ℃)
		300	mM	KCl
		1	mM	DTT
		0.1	mM	EDTA
		1	%	Triton X- 100
		500	μg/ml	BSA
		50	%	Glycerol

Contaminant Assay

1.Ribonuclease Activity : When 100 units of this enzyme were incubated with 1 μg of RNA for 2 hours at 37 ℃ ,no ribonuclease activity was observed by agarose gel electrophoresis.

2.Endonuclease Activity : When 5 units of this enzyme were incubated with 1 μg of λ-DNA for 16 hours at 75℃ ,no endonuclease activity was observed by agarose gel electrophoresis.

3.Nicking Activity : When 12.5 units of this enzyme were incubated with 1 μg of pBR322 for 16 hours at 75 ℃ ,no nicking activity was observed by agarose gel electrophoresis.

Purity

1 .SDS-PAGE : 90 % pure

Purchase of this product is accompanied by a limited licence to use it in the Polymerase Chain Reaction(PCR)process for the Research Field in conjunction with a thermal cycler whose use in the automated performance of the PCR process is covered by the up-front licence fee,either by payment to Perkin-Elmer or as purchased,i.e.,an authorized thermal cycler.