PuriTaq DNA polymerase

Cat No.	PU-TQB-500
Storage:	-20℃
Lot:	******
Size:	500 U
	400 rxn per 50 ul reaction or 1000 rxn per 20 ul reaction

Product content:

PuriTaq (5 unit/ul)	100	ul
10 X Buffer	2	ml

Description:

- ✓ A recombinant thermo-stable enzyme derived from *Thermos sp. bacterium*
- ✓ Optimized for use in the polymerase chain reaction
- ✓ The amplification products are ready to clone directly into TA cloning vectors

10 X reaction Buffer

Contain 20 mM Mg^{2+} and 1 mg/ml BSA.

The reaction buffer is supplied as 10 X concentrate and should be diluted for use.

Storage Buffer:

50 mM Tris-HCl (pH 9.0), 100 mM NaCl, 0.1 mM EDTA, 1% Triton X-100, 5 mM DTT, 50% Glycerol

Unit Definition:

One unit is defined at the amount of enzyme that will incorporates 10 nmol of dNTP into acid-insoluble material in 30 minutes at 72℃

Basic Reactions Conditions:

Components	Volume		Final Concentration
10 X PCR buffer	5 ul	2 ul	1 X
10 mM dNTPs	1 ul	0.4 ul	200 uM each
Forward primer (10 uM)	0.5~2.5 ul	0.2~1 ul	0.1~0.5 uM
Reverse primer (10 uM)	0.5~2.5 u	0.2~1 ul	0.1~0.5 uM
Template DNA	≧ 1 ul	≧ 1 ul	Genomic DNA 10~250 ng
			Plasmid DNA 0.1~10 ng
PuriTaq DNA polymerase (5 U/ul)	0.25 ul	0.1 ul	1.25 U/ 50 ul 0.5 U/ 20 ul
Autoclaved, distilled water	To 50 ul	To 20 ul	

Cycling parameters:

Stage	Number of cycle	Temperature	Duration	
Stage 1	1	94℃	2~5 min	Initial denature of template
Stage 2	25~35	94℃	20~40 sec	Denature
		55~65℃	30~60 sec	Annealing
		72℃	X min*	Elongation
Stage 3	1	72℃	7 min	Final elongation
Stage 4	1	4℃	Forever	

* The elongation time should base on target size, usually 1 min/kb PCR target.