



Pfu DNA polymerase

Product Name	Pfu DNA polymerase
Catalog No	IT-000- Pfu
Source	Recombinant protein from E.coli.
Formulation	50mM Tris-HCL (pH8.2), 1mM DTT, 0.1mM EDTA, 0.1% Tween 20, 0.1% Nonidet P-40 and 50% (v/v) glycerol.
Protein	6xHis tagged Pfu DNA polymerase (GenBank# BAA02362).
Applications	PCR, mutagenesis, ect.
Activity	2 U/ μ l; Pfu DNA polymerase also possesses both 5'- to 3'- DNA polymerase and 3'- to 5'- exonuclease activity.
Definition of Activity Unit	One unit of activity is the amount of cloned Pfu DNA polymerase required to incorporate 10nM of [H] TTP into an acid-insoluble form in 30 minutes at 72°C.
Storage	Kept at -20°C. Non-hazardous. No MSDS required.
Use Limitation	For research use only, not for use in diagnostic procedures.
Note	10X buffer contains 200 mM Tris-HCl (pH 8.8), 100 mM (NH ₄) ₂ SO ₄ , 100mM KCl, 20 mM MgSO ₄ , 1% Triton X-100 1 mg/ml BSA.
Typical Cycling	95°C for 2min; 95°C for 20-40sec, (PrimerT _m -5)°C for 20-40sec, 72°C 45sec-2min/kb, 25-35 cycles; 72°C for 5-10min; 4°C forever.

Reagent	Final Concentration	Quantity
10x Pfu reaction buffer	1x	5 μ l
2.5mM dNTP mixture	200 μ M of each	4 μ l
Primer I, forward	0.1-1 μ M	variable
Primer II, reverse	0.1-1 μ M	variable
Template DNA	1-20ng plasmid or phage DNA; or 0.1-1 μ g for genomic DNA	variable
DMSO	3% (v/v)	1.5 μ l
Water (PCR--Grade)	---	variable
Pfu DNA polymerase	1- 1.5U	0.5-0.75 μ l
Total Volume	---	50 μ l