

Pfu DNA Polymerase

Catalog #	Pack size	Price(\$)
ZP00202	500U(5U/ul)	18.00
ZP00203	1000U(5U/ul)	34.00

Description:

Pfu DNA Polymerase is a thermostable enzyme of approximately 90kDa isolated from *Pyrococcus furiosus*. The enzyme replicates DNA at 75°C, catalyzing the polymerization of nucleotides into duplex DNA in the 5'-3' direction in the presence of magnesium. Pfu DNA Polymerase also possesses 3'-5' exonuclease (proofreading) activity. Base misinsertions that may occur during polymerization are rapidly excised by the proofreading activity of the polymerase. Consequently, Pfu DNA Polymerase is recommended for use in PCR and primer extension reactions that require high-fidelity synthesis. Pfu DNA Polymerase-generated PCR fragments are blunt-ended.

Source:

Pyrococcus furiosus strain Vc1 DSM3638.

Features:

High Fidelity: Pfu DNA Polymerase exhibits the lowest error rate of any thermostable DNA polymerase.

Applications:

Pfu DNA Polymerase is recommended for use in PCR, primer extension reactions and other applications that demand high fidelity.

Unit Definition:

One unit is defined as the amount of enzyme required to catalyze the incorporation of 10nmol of dNTPs into acid-insoluble material in 30 minutes at 75°C.

Concentration:5U/ul

Quality Control Tests:

PCR (activity), SDS-PAGE (purity), endonuclease/nickase.

