



Pfu DNA Polymerase

Pfu DNA polymerase; derived from the hyperthermophilic archae *Pyrococcus furiosus*; has superior thermostability and proofreading properties compared to other thermostable polymerase. Its molecular weight is 90 kD. It can amplify DNA target up to 2kb. The elongation velocity is 0.2~0.4kb/min (70~75°C). Pfu DNA polymerase possesses 3' to 5' exonuclease proofreading activity that enables the polymerase to correct nucleotide-misincorporation errors. This means that Pfu DNA polymerase-generated PCR fragments will have fewer errors than Taq-generated PCR inserts. Using Pfu DNA polymerase in your PCR reactions results in blunt-ended PCR products; which are ideal for cloning into blunt-ended vectors. Pfu DNA polymerase is superior for techniques that require high-fidelity DNA synthesis.

One unit (U) of enzyme is defined as the amount of enzyme needed to catalyze the incorporation of 10nm of deoxyribonucleotides into acid-insoluble material in 30 minutes at 70°C using herring sperm DNA as a substrate.

Catalog No.	510003
Size	250U
Product Category	PCR / qPCR / RT-PCR
Storage/Stability	-20°C/1 year
Shipping	Gel Packs