



Recombinant *P. furiosus* DNA Polymerase (DAG3580)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Recombinant Pfu DNA Polymerase
Species	<i>P. furiosus</i>
Conjugate	Unconjugated
Applications	1. Ideal for high-fidelity amplification. 2. 3'-5' exonuclease activity provides a low error rate. 3. One of the most thermostable DNA polymerases known. 4. Lack of extendase activity means no unwanted 3' overhangs. 5. Optimal for blunt-end PCR cloning.
Format	Sterile liquid formulation. 50 mM Tris-HCl, pH 8.2 + 1 mM DTT + 0.1 mM EDTA + 0.05% CHAPS and 50% glycerol.
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	Pyrococcus furiosus is an extremophilic species of Archaea. It can be classified as a hyperthermophile because it thrives best under extremely high temperatures—higher than those preferred of a thermophile. It is notable for having an optimum growth temperature of 100°C (a temperature that would destroy most living organisms), and for being one of the few organisms identified as possessing enzymes containing tungsten, an element rarely found in biological molecules.
Keywords	DNA polymerase; EC 2.7.7.7; Pfu polymerase; Pfu-DNA Polymerase; Pyrococcus furiosus; <i>P. furiosus</i>