

PR Polymerase

Description: PR Polymerase is a thermostable, DNA-dependent, DNA polymerase that exhibits robust ProofReading activity. The enzyme exhibits optimum polymerization activity at 72°C in presence of Mg²⁺ ions. The 3' to 5' exonuclease mediated proof reading activity enables the enzyme to proofread misincorporated nucleotides and reduce errors during polymerization.

PR Polymerase is the enzyme of choice for high fidelity DNA synthesis. It can be efficiently utilized for high fidelity PCR amplification of DNA fragments to be used for gene cloning, site-directed mutagenesis and other genetic manipulations.

Assay Buffer (1X): 20 mM Tris-HCl (pH 8.8), 10 mM (NH₄)₂ SO₄, 10 mM KCl, 2 mM MgSO₄, 0.1% Triton X 100 and 100 µg/ml Nuclease free BSA.

Storage buffer:

50 mM Tris-HCl (pH 8), 0.1 mM EDTA, 0.1% Tween 20 (v/v), 0.1% Igepal, 1 mM DTT and 50% Glycerol (v/v).

Specification:

Enzyme is supplied at a concentration of 3 U/µl. With every order of PR Polymerase we supply one vial of 10X assay buffer.

PR Polymerase is recommended for use in PCR and primer extension reaction that require high fidelity. The product can be efficiently used for:

- Gene cloning
- DNA expression
- Mutation analysis and
- Other genetic manipulations.

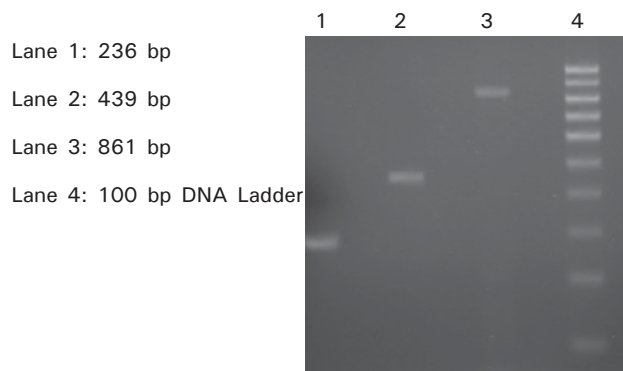
Ordering Information:

Product	Size	Cat #
PR Polymerase	100 U	105895
	250 U	105897
	500 U	105896

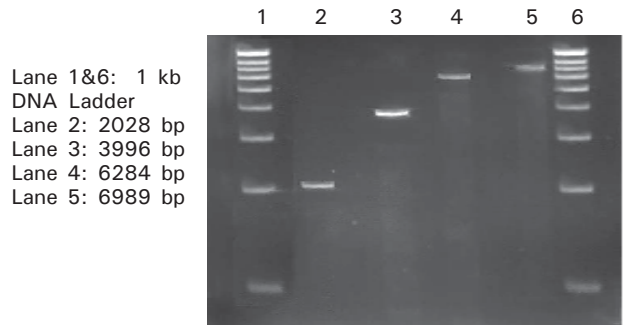
Performance Test:

PR Polymerase is tested extensively for PCR amplifications of specific DNA fragments using human genomic DNA and λ DNA as templates. The conditions need to be optimized for each individual system. It is observed that for products < 1.5kb, 1 to 1.5 units of enzyme in a 50 µl reaction mix yields a single, specific band of interest. For products > 1.5kb, optimization is required.

Store at : -20°C



Amplification of human genomic DNA with ARMS primers (For β-Thalassemia) using 1 unit of PR Polymerase, analysed on 2% agarose gel.



Amplification of Lambda DNA template using specific primers and 1.5 units of PR Polymerase, analysed on 1% agarose gel.