

## Alba Pfu DNA Polymerase

Cat. No.	Pack Size
MTE0039	500 Units
MTE0040	1000 Units
MTE0041	2500 Units

### Applications:

- Close to 10 times more accurate than Taq DNA Polymerase
- Produces Blunt-End amplification Products for Cloning
- Remains active even after incubation at 95°C for 90 minutes

### Reagents Provided:

- **Alba Pfu DNA Polymerase** in Storage Buffer: 20 mM Tris-HCl (pH 8.0), 1mM DTT, 0.1 mM EDTA, 100 mM KCl, 0.5% Nonidet P40, 0.5% Tween 20 and 50% glycerol.
- 10X Pfu Buffer: 100 mM Tris-HCl (pH 8.8 at 25°C), 100 mM KCl, 1% Triton X-100 and 1 mg/ml BSA.
- 10X Pfu Buffer with MgSO<sub>4</sub>: 200 mM Tris-HCl (pH 8.8 at 25°C), 100 mM KCl, 100 mM (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, 1% Triton X-100, 1 mg/ml BSA and 20 mM MgSO<sub>4</sub>.
- 25 mM MgSO<sub>4</sub> Solution

### Storage:

Store at -20°C. Guaranteed stable for 6 months when properly stored.

### Source:

Recombinant *E. coli* strain with cloned gene encoding *Pyrococcus furiosus* DNA Polymerase.

### Description:

**Alba Pfu DNA Polymerase** possesses 5' - 3' DNA Polymerase activity and 3' - 5' exonuclease (proof reading) activity.

**Alba Pfu DNA Polymerase** exhibits extremely low error rates; it is up to ten-fold more accurate than Taq Polymerase. Consequently, **Alba Pfu DNA Polymerase** is useful for polymerisation reactions requiring high-fidelity synthesis.

### Quality Control:

Activity and stability tested at 20, 30 and 40 cycles of PCR reactions at 95°C. Tested for the absence of human DNA contamination by PCR with Alu-specific primers. Free of detectable, non-specific nucleases.

### Unit definition:

One unit of the enzyme catalyzes the incorporation of 10 nanomoles of deoxyribonucleotides into a polynucleotide fraction in 30 min at 70°C.

**Concentration:** 5 Units/μl.

### Safety Warnings:

**For research use only. Not recommended or intended for diagnosis of disease in humans or animals. Do not use internally or externally in humans or animals.**

### Related Products:

Cat. No.	Product	Pack Size
MTE0059	Alba 10X Taq Buffer	2 ml
MTE0060	Alba 10X Taq Buffer with (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	2 ml
MTE0057	Alba MgCl <sub>2</sub>	2 ml
MTE0058	Alba MgCl <sub>2</sub>	5 x 2 ml
MTE0054	Alba PCR water	10 x 2 ml
MTE0055	Alba PCR water	25 x 10ml
MTE0056	Alba PCR water	5 x 10ml
MTE0017	MTE 20 mM Nucleotide Mix	20 μmol
MTE0018	MTE 20 mM Nucleotide Mix	100 μmol