

## Alba RedTaq DNA Polymerase

Cat. No.	Pack Size
MTE0033	500 Units
MTE0034	1000 Units
MTE0035	2500 Units

### Applications:

- Easy visualisation of enzyme addition
- Visualisation of complete reaction mixing
- Direct Loading of Samples following amplification.

### Reagents Provided:

- **Alba RedTaq 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 PCR Buffer: 100 mM Tris-HCl (pH 8.8 at 25°C), 500 mM KCl and 0.8% Nonidet P40.
- 10X PCR Buffer with (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>: 750 mM Tris-HCl (pH 8.8 at 25°C), 200 mM (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> and 0.1% Tween 20.
- 25 mM MgCl<sub>2</sub> Solution

### Storage:

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

### Source:

Recombinant *E. coli* strain with cloned gene encoding *Thermus aquaticus* DNA Polymerase.

### Description:

**Alba RedTaq DNA Polymerase** has a special formulation that includes an inert Red dye. The Red dye does not interfere with the PCR reaction. The strong Red colour allows the user to visually confirm Polymerase addition and verify adequate mixing. The reaction products can be loaded directly onto an agarose gel, without the addition of loading buffer, as the dye can serve as a marker for electrophoresis.

**Alba RedTaq DNA Polymerase** catalyzes the 5' - 3' synthesis of DNA and lacks 3' - 5' exonuclease activity.

The enzyme has a high amplification yield and is stable at high temperatures.

To activate the **Alba RedTaq DNA Polymerase** it should be incubated at 95°C – 97°C for 15 minutes as a First PCR Step.

### 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:** 1 Unit/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