

## Tfl DNA Polymerase

*(Thermus flavus)*

Cat. No.	size
E1112-01	200 units
E1112-02	1 000 units

**Unit Definition:** One unit is defined as the amount of enzyme required to incorporate 10 nmoles of total deoxynucleotides into acid-insoluble material in 30 minutes at 74°C.

**Storage Conditions:** Store at -20°C.

Stable thermophilic DNA polymerase, suitable for applications requiring high temperature synthesis of DNA.

### Description:

- Efficiently synthesizes DNA at elevated temperatures (1).
- Used for high temperature DNA sequencing.
- Broader Mg<sup>2+</sup> ions concentration tolerance than Taq DNA polymerase.
- Can be used for amplification of nucleic acids in PCR and LCR reaction.

### Storage Buffer:

20 mM Tris-HCl (pH 8.0 at 22°C), 100 mM KCl, 0.1 mM EDTA, 1 mM dithiothreitol, 50% glycerol and stabilizers.

### 10 x Reaction Buffer:

#### 10 x Pol Buffer A (optimization buffer without MgCl<sub>2</sub>):

The buffer allows to optimize MgCl<sub>2</sub> concentration.

#### 10 x Pol Buffer B (general application, up to 10 kb):

The buffer contains 15 mM MgCl<sub>2</sub> and is optimized for use with 0.2 mM of each dNTP.

### Quality Control:

All preparations are assayed for contaminating endonuclease, 3'-exonuclease, and nonspecific single- and double-stranded DNase activities. Typical preparations are greater than 95% pure, as judged by SDS polyacrylamide gel electrophoresis.

### References:

1. Kaledin, A.S., Sliusarenko, A.G. and Gorodetskii, S.I. (1980) *Biokhimiya* 45, 644.