

## PRODUCT INFO

### Bst DNA Polymerase, Large Fragment (BstLF)

Cat. No. E-10010



#### Description

Bst DNA Polymerase, Large Fragment is the portion of the *Bacillus stearothermophilus* DNA Polymerase protein that contains the 5' → 3' polymerase activity, but lacks 5' → 3' exonuclease activity. Enzyme provide strong strand displacement activity.

Optimal enzyme activity: 65°C and pH 8.8.

Enzyme inactivation: heating at 80°C for 20 minutes.

The enzyme contains bacterial DNA.

**Attention! The enzyme is supplied without reaction buffer!**

#### Applications:

Loop-mediated isothermal amplification (LAMP)

Reverse transcription

Whole Genome Amplification

#### Source

Bst DNA Polymerase, Large Fragment is prepared from an *E. coli* strain containing the gene DNA polymerase gene *Bacillus stearothermophilus*, lacking the 5' → 3' exonuclease domain.

#### Unit Definition

One unit is defined at the amount of enzyme that will incorporate 10 nmol of dNTP into acid insoluble material in 30 minutes at 65°C.

**Enzyme concentration:** 10 u/μl.

Cat. No	Product name	Quantity	Volume
E-10010	Bst DNA Polymerase, Large Fragment	10 000 u	1000 μl

#### Storage Buffer

10 mM Tris-HCl (pH 7.1 at 25°C), 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.1% Triton X-100, 50% glycerol.

#### Quality control

Each batch of enzyme is tested for enzyme activity, SDS-PAGE electrophoretic purity, and the absence of nonspecific endonuclease and exonuclease activity.

#### Storage and transportation conditions

Stored at -20°C. Transportation at room temperature is allowed for no more than a day.

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