

## Bst DNA Polymerase

<b>Catalog Number</b>	LDG0021RF
<b>Package</b>	1,600 U / 8,000 U / Customized package

For full product information, images and publications, please visit [our website](#).



### Overview

#### Description

Bst DNA Polymerase (Large fragment) is an enzyme of *Bacillus stearothermophilus* DNA polymerase which can catalyze 5' → 3' polymerase activity but lacks 5' → 3' exonuclease activity. Bst DNA Polymerase offers strand displacement capabilities, making it ideal for isothermal amplification.

#### Product Note

- It is not recommended to perform reaction above 70 °C. Bst DNA Polymerase cannot be used for thermal cycle sequencing.
- 10X Bst DNA Polymerase Reaction Buffer: 200 mM Tris-HCl (pH 8.8), 10 mM (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, 10 mM KCl, 20 mM MgSO<sub>4</sub>, and 1% Triton® X-10.

#### Components

Package	Items	Quantity
1,600 U	Bst DNA Polymerase (Large Fragment) (8 U/μL)	1 vial (1,600 U)
	10× Bst DNA Polymerase Reaction Buffer	1 vial (1 mL)
	100 mM MgSO <sub>4</sub>	1 vial (0.4 mL)
8,000 U	Bst DNA Polymerase (Large Fragment) (8 U/μL)	1 vial (8,000 U)
	10× Bst DNA Polymerase Reaction Buffer	1 vial (1 mL)
	100 mM MgSO <sub>4</sub>	1 vial (0.4 mL)

## Specifications

### Expression system

Escherichia coli

### Concentration

8 U/ $\mu$ L

### Purity

>98% as determined by SDS-PAGE analysis.

### Form

Liquid

### Application

Loop-mediated Isothermal Amplification (LAMP)

### Buffer

Bst DNA Polymerase (Large fragment) is supplied in 10 mM Tris-HCl (pH7.5), 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 0.1% Triton® X-100 and 50% Glycerol.

### Unit Definition

One unit is defined as the amount of the enzyme incorporates 10 nmol of dNTP into acidinsoluble product in 30 minutes at 65°C.

## Instruction

### Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

### Stability & Storage

This product is stable after storage at:

- -20°C or -80°C for 12 months under sterile conditions from date of receipt.

Avoid repeated freeze/thaw cycles.

**Disclaimer :** For Research Use or Further Manufacturing Only.