

Bst DNA polymerase (Large fragment)

Cat.#	Conc.	Size
DP006S	8 units/μl	1,600 units
DP006L	8 units/μl	8,000 units
DP006H	100 units/μl	8,000 units

Store at -20°C

Supplied With: 10X Bst DNA Polymerase(Large) Buffer
Sterile water

Product description

Large Fragment of the Bst DNA Polymerase from *Bacillus stearothermophilus* is isolated as a recombinant. It lacks the 5' → 3' exonuclease domain. Therefore, Large Fragment of the Bst DNA Polymerase catalyzes 5' → 3' synthesis of DNA and but lacks 5' → 3' and 3' → 5' exonuclease activities.

Characteristics

- Isolated from a recombinant source
- Sequencing through problematic secondary structures
- Thermophilic DNA polymerase with strong strand displacement activity

Applications

- Random-primed DNA labeling
- Labeling by fill-in 5'-overhangs of dsDNA
- Loop-mediated isothermal amplification (LAMP)
- Whole genome amplification (WGA)
- Ramification amplification (RAM)

Quality control

- Purity: >99% on SDS-PAGE
- Endonuclease-free
- Exonuclease-free
- RNase-free

For Research Use Only. Not for use in diagnostic procedures.

ISO9001 ISO14001 ISO13485

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.

Storage buffer

10 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 0.1% Triton® X-100, pH 7.4 @ 25°C.

1X Reaction buffer

20 mM Tris-HCl, 10 mM (NH₄)₂SO₄, 10 mM KCl, 2 mM MgSO₄, 0.1% Triton® X-100, pH 8.8 @ 25°C.

Standard reaction conditions

Example : loop-mediated isothermal amplification method (LAMP)

10X Bst DNA Polymerase Buffer	2 μl
dNTP mixture (2.5 mM each)	2 μl
Inner primer sets	20 pmol
Outer primer sets	20 pmol
Bst DNA Polymerase (Large fragment) (8 units/μl)	1 μl
Sterile water	Up to 20 μl

→ Incubate at 50 ~ 65°C for 60 min.

→ Incubate 10 min at 80°C to stop the reaction.

India Contact:

Life Technologies (India) Pvt. Ltd.
306, Aggarwal City Mall, Opposite M2K Pitampura,
Delhi – 110034 (INDIA).
Ph: +91-11-42208000, 42208111, 42208222
Mobile: +91-9810521400
Fax: +91-11-42208444
Email: customerservice@lifetechindia.com
Web: www.lifetechindia.com

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