



## Bsu DNA Polymerase Large Fragment

### Manual

<b>Catalog #</b>	3582	3585	3587
<b>Package Size</b>	200 units	1000 units	2000 units
<b>Volume</b>	40µl	200µl	500µl
<b>Concentration</b>	5 units/µl		



### Important!

#### **-20°C Storage Required**

- \* Immediately inspect packages
- \* Freeze upon receipt



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## Description:

Intact Genomics (ig®) Bsu DNA Polymerase I, Large Fragment is a product of the *Bacillus subtilis* DNA polymerase I which lacks the N-terminal exonuclease domain (1-296 amino acids). It retains the 5' → 3' polymerase activity of DNA polymerase I but lacks the 5' → 3' exonuclease activity. This large fragment also lacks 3' → 5' exonuclease activity (1)

## Protein Purity:

The physical purity of this enzyme is ≥98% as assessed by SDS-PAGE with Coomassie® blue staining (Fig. 1).

## Applications:

- Strand displacement DNA synthesis (2)
- Random primer labeling
- Second strand cDNA synthesis
- dA-tailing

## Product Components:

- Bsu DNA Polymerase I, Large fragment
- 10x Bsu DNA Polymerase I reaction buffer

## Product Source:

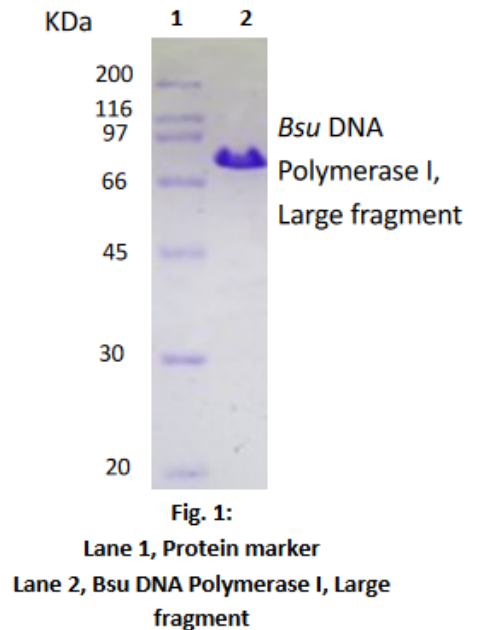
*E. coli* strain expressing Bsu DNA Polymerase I gene lacking the N-terminal 5' → 3' exonuclease domain.

## Storage Buffer:

50 mM Tris-HCl, 50 mM KCl, 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, pH 7.5 @ 25°C

## Heat Inactivation:

70°C for 20 min



### Quality Control:

Bsu DNA Polymerase Large fragment is free from detectable nuclease activities.

### Unit Definition:

One unit is defined as the amount of enzyme that incorporates 10 nmoles of dNTP into acid-insoluble form in 30 minutes at 37° C.

### References:

1. Okazaki, T. et al. (1964) J. Biol. Chem. 239, 259–268.
2. Piepenburg, O. et al. (2006) PLOS Biology, 4, 1115–1121.

### Related Products:

- T4 UvsX DNA Recombinase (Cat.# 3562)
- T4 UvsY Protein (Cat.# 3572)
- *Sau* DNA Polymerase (Cat.# 3595)
- T4 gp32 Protein (Cat.# 3515)
- Exonuclease III (Cat.# 3415)
- Exonuclease IV (Nfo) (Cat.# 3425)

### Ordering Information:

- Order online within the USA. Place orders on **www.intactgenomics.com** using our secure Shopping Cart.
- Order by email, phone, or fax.  
Email: **sales@intactgenomics.com**  
Phone: (314) 942-3655 | Toll-free : 855-835-7172 | Fax: (314) 942-3656
- Order via our distributors.

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## Product Use Limitation and Disclaimers

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## Technical Support & Customer Services

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Our hours are Monday - Friday, 8AM to 5PM, U.S. Central Standard Time.

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