



Sau DNA Polymerase I, Large Fragment

Manual

Catalog #	3592	3595
Package Size	200 units	1,000 units
Volume	40 µl	200 µl
Concentration	5 µg/µl	5 µg/µl



Important!

-20°C Storage Required

- * Immediately inspect packages
- * Freeze upon receipt



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Description:

Intact Genomics (ig®) *Sau* DNA Polymerase I, Large Fragment is a product of the *Staphylococcus aureus* DNA polymerase I which lacks the N-terminal exonuclease domain (1-293 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.

Applications:

- Strand displacement DNA synthesis (1)
- Random primer labeling
- Second strand cDNA synthesis
- dA-tailing

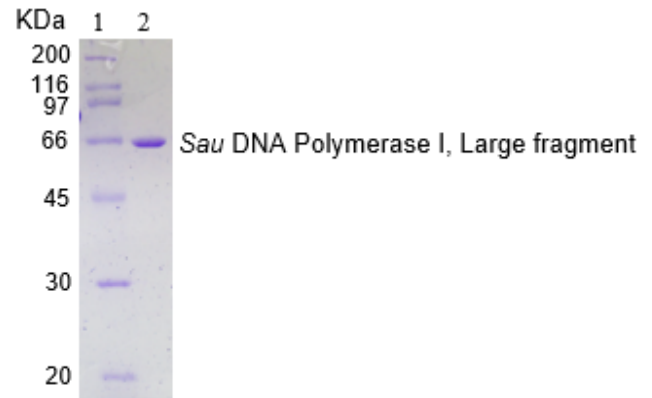


Fig: Lane 1. Protein marker and lane 2. *Sau* DNA Polymerase I, Large fragment.

Protein Purity:

The physical purity of this enzyme is ≥99% as assessed by SDS-PAGE with Coomassie® blue staining (see figure above).

Product Source:

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

Product Components:

- *Sau* DNA Polymerase I, Large Fragment
- 10x *Sau* DNA Polymerase I Reaction Buffer

1x *Sau* DNA Polymerase I Reaction Buffer:

10 mM Tris-HCl, 50 mM KCl, 10 mM MgCl₂, 1 mM DTT, pH 7.9 @ 25°C

Storage Buffer:

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

Storage Temperature:

-20°C

Heat Inactivation:

70°C for 20 min

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.

Quality Control Assays:

Sau DNA Polymerase I, Large fragment is free from detectable nuclease activities.

Related Products:

- T4 UvsX DNA Recombinase (Cat.# 3562, 3565)
- T4 UvsY Protein (Cat.# 3572)
- *Bsu* DNA Polymerase (Cat.# 3585)
- 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.

References:

1. Piepenburg, O. et al. (2006) PLOS Biology, 4, 1115–1121.

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

Intact Genomics, Inc.

11840 Westline Industrial Drive, Suite 120,
St. Louis, MO. 63146, USA

Phone: (314) 942-3655 | **Toll-free :** 855-835-7172 | **Fax:** (314) 942-3656

Email: sales@intactgenomics.com | ig@intactgenomics.com

Website: www.intactgenomics.com

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