

BsaI

Cat. No.: L359050 | Pack size: 1 KU; 5 KU | Storage: Store at -20°C, Avoid repeated freezing and thawing

Product Information

Item	Description
Product Name	BsaI
Synonyms	Eco31I BsaI
Grade	BioReagent, for DNA and RNA applications, for DNA synthesis, For In Vitro Transcription, PCR Reagent, Suitable for molecular biology, EnzymoPure™
Specifications & Purity	BioReagent, PCR Reagent, for DNA synthesis, Suitable for molecular biology, EnzymoPure™, For In Vitro Transcription, for DNA and RNA applications, 20 U/μl
Molecule Type	Enzyme
Concentration	20 U/μl
Storage Conditions	Store at -20°C, Avoid repeated freezing and thawing
Shipped In	Ice chest + Ice pads

Product Description

Restriction enzymes are a class of endonuclease enzymes that recognize specific sequences of deoxyribonucleotides and cut the phosphodiester bond between two deoxyribonucleotides at specific sites in each chain. BsaI is an IIS restriction enzyme that recognizes non-palindromic sequences and cuts sticky ends outside the recognition sequence.

Source

E.coli

Restriction Enzyme Cutting Site

5'...GGTCTC(N)1↓...3'

3'...CCAGAG(N)5↑...5'

Enzyme Activity Definition

The amount of enzyme required to fully digest 1 µg λDNA Dcm-HindIII fragments within 1 h in a 50 µl reaction system at 37 is defined as 1 activity unit (U).

Protocol

Example 1: DNA rapid enzyme digestion

(1) Configure the mixture as shown in the following table:

Component	Genome DNA	PCR Product	Plasmid DNA
RNase-free Water	To 50 µl	To 30 µl	To 20 µl
10× Cut Reaction Buffer	5 µl	3 µl	2 µl
DNA	10 µl (5 µg)	10 µl (0.2 µg)	2 µl (1 µg)
BsaI	5 µl	1 µl	1 µl

(2) Gently mix, do not oscillate the vortex, and then instantaneous centrifugation.

(3) Reaction at 37°C for 15 min (plasmid), or 15-30min (PCR product), or 30-60 min (genomic DNA).

(4) Reaction at 80°C for 20 min can deactivate the enzyme and terminate the reaction (optional).

Example 2: It is suitable for extended reaction system of plasmids

RNase-free Water	To 20 µl	To 20 µl	To 30 µl	To 40 µl	To 50 µl
10× Cut Reaction Buffer	2µl	2 µl	3 µl	4 µl	5 µl
Plasmid	1 µg	2 µg	3 µg	4 µg	5 µg
BsaI	1 µl	2 µl	3 µl	4 µl	5 µl

Cautions

- (1) The methylation of Dcm, CpG and EcoB I will impair the cutting activity of this product.
- (2) Unpurified PCR products have a certain ionic strength. In addition, since DNA polymerase also has exonuclease activity, it will affect the enzyme digestion products. Therefore, cloning and other operations need to be performed in the following step.
- (3) This product is for scientific research only and shall not be used for other purposes.

Contact & Global Offices

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Limitations & Disclaimer

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