BsaI GMP-grade (20 U/μL)

Product description

This product is a type IIS restriction endonuclease derived from the recombinant protein encoded by the BsaI gene in *Bacillus sphaericus* expressed by *E. coli*. Its recognition sequence is 5'-GGTCTCN1/N5-3'. Use to digest plasmids to prepare poly(A/T/G/C)-terminated linearized DNA fragments to obtain specific cohesive ends.

This product is produced in accordance with GMP process requirements and provided in a liquid form.

Specifications

Expression Host	Recombinant *E. coli* with BasI gene
Reaction Temperature	37℃
Storage Buffer	10 mM Tris-HCl, 0.2 M NaCl, 0.1 mM EDTA, 1mM DTT, 50% Glycerol
Unit Definition	1 unit: The amount of enzyme required to digest 1 μg of substrate DNA within 1 h at 37℃ in a 50 μL system.
Application	1.Digest the plasmid to prepare a linearized DNA fragment at the end of Poly (A/T/C/G); 2.Digestion of DNA to obtain specific sticky ends; 3.Linearize plasmid template before in-vitro transcription.

Components

Components No.	Name	10661ES03 (1 KU)	10661ES10 (10 KU)	10661ES60 (100 KU)
10661	BsaI GMP-grade (20 U/μL)	50 μL	500 μL	5 mL

Storage

This product should be stored at -25 ~ -15℃ for two years.

Instructions

Experimental methods

50 μL reaction system

This step is suitable for linearization of 1 μg DNA (≥100 nt) and can be scaled up according to experimental needs.

1. Add the following components in sequence:

Components	Volume
Plasmid DNA	1-2 μg
10×Digestion Buffer 4	5.0 μL
BsaI (20 U/μL)	1.0 μL

RNase-free ddH_2O	Up to 50 μL

【Note】10× Digestion Buffer 4(Cat#10668ES): 500 mM Potassium Acetate, 200 mM Tris-acetate, 100 mM Magnesium Acetate, 1 mg/ml OsrHSA, pH7.9@25℃

2. Incubate at 37° C 1 h;
3. DNA linearization is complete, and subsequent experiments can be performed.

Notes

1. Heat inactivation condition: incubate at 80° C for 20min.
2. Please operate with lab coats and disposable gloves, for your safety.