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Bsa I 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 Bas I gene
Reaction Temperature	37°C
Storage Buffer	10mM Tris-HCl, 0.2M NaCl, 0.1mM EDTA, 1mM DTT, 50% Glycerol, 0.2mg/ml OsrHSA pH 7.4±0.2 (25°C)
Unit Definition	1 unit: The amount of enzyme required to digest 1 μg of substrate DNA within 1 h at 37°C 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	Bsa I GMP-grade (20 U/μL)	50 μL	500 μL	5 mL

Storage

This product should be stored at -25 ~ -15°C 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
Bsa I (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.