



Ver. HB221110

BspQI GMP-grade (10 U/ μ L)

Product description

This product is a type II restriction endonuclease derived from the recombinant protein encoded by the BspQI gene in *Bacillus sphaericus* expressed by *E. coli*. Its recognition sequence is 5'-GCTCTTCN1/N4-3'. 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.

Components

Components No.	Name	10664ES76 (500 U)	10664ES86 (2,500 U)	10664ES92 (10 KU)	10664ES98 (100 KU)
10664	BspQI GMP-grade (10 U/ μ L)	50 μ L	250 μ L	1 mL	10 mL

Specifications

Expression Host	Recombinant <i>E. coli</i> with BspQI gene
Reaction Temperature	50°C
Storage Buffer	20 mM Tris-HCl, 0.5 M KCl, 0.1 mM EDTA, 1mM DTT, 0.1% Triton X-100, 50% Glycerol
Unit Definition	1 unit: The amount of enzyme required to digest 1 μ g of λ DNA within 1 h at 50°C in a 50 μ L system
Application	1. Digest the plasmid to prepare a linearized DNA fragment at the end of Poly (A/T/C/G); 2. Linearize plasmid template before in vitro transcription 3. Restriction digest

Shipping and Storage

The product is shipped with dry ice and can be stored at -15°C ~ -25°C for one year.

Instructions

1. 50 μ L Reaction System

This step is suitable for linearization of 1 μ g DNA (\geq 100 nt) and can be scaled up according to experimental needs.

1.1 Add the following components in sequence:

Components	Volume
Plasmid DNA	1-2 μ g
10 \times Digestion Buffer 3	5.0 μ L
BspQI (10 U/ μ L)	1.0 μ L
RNase-free ddH ₂ O	Up to 50 μ L

[Note] 10 \times Digestion Buffer 3(Cat#10667): 500mM Tris-HCl, 1M NaCl,100mM MgCl₂, 1mg/mL OsrHSA, pH7.9 at 25°C

1.2 Incubate at 50°C 1 h.

1.3 DNA linearization is complete, and subsequent experiments can be performed.



Notes

1. The volume of restriction endonuclease added should not exceed 1/10 of the reaction volume.
2. For your safety and health, please wear personal protective equipment (PPE), such as laboratory coats and disposable gloves, when operating with this product.