



## BspQI

**Product Number: M062011**

**Animal origin free**

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### Shipping and Storage

-20±5°C.

### Component

Component	M062011	M062011
BspQI(10U/μl)	100μl	1ml
10×BspQI Reaction Buffer	500μl	1ml×5

### Description

Restrictive endonucleases, also known as restriction enzymes, are a type of nucleic acid endonucleases that recognize specific deoxyribonucleotide sequences and cleave the phosphodiester bonds between two deoxyribonucleotides at specific locations in each strand. Restriction enzymes are an important component of the "restriction modification system", and their biological function is mainly to protect the host from foreign DNA infection. They are now widely used in various fields such as gene localization and cloning, gene structure research, DNA sequence analysis and determination, gene synthesis, and so on. This product is a recombinant protein encoded by the BspQI gene of *Bacillus thuringiensis* (*Bacillus sphaericus*), and is an IIS type restriction endonuclease. This product strictly controls the residual nucleic acid enzyme of the host, with high enzyme activity and specificity strong.

### Features

This product has strong specificity and can be specifically cleaved for the identified DNA sequence. The identification sequence is as follows:

1. 5'...GCTC TTC(N)1↓...3'
2. 3'...CGAGAAG(N)4↑...5'

### Application

1. Linearization of in vitro transcription templates;
2. Molecular cloning;
3. Genotyping;
4. Southern hybridization;
5. Restrictive fragment length polymorphism (RFLP).

### Unit definition

1 unit: The amount of enzyme required to digest 1μg of λDNA within 1h at 50°C in a 50μL system.

### Protocol

50μL reaction system.

Reaction conditions: 50°C, reaction 1-16 hours, after completion of the reaction, incubation at 80°C for 20 minutes can terminate the reaction.

Components	Volume
10×BspQI Reaction Buffer	5μl
DNA	1μg
BspQI	1μl



## **Tinzyme Co., Limited**

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RNase Free Water

Up to 50µl

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### **Note:**

1. Under the condition of BspQI glycerol concentration > 5%, asterisk activity may occur;
2. BspQI is not sensitive to Dam, Dcm, and mammalian CpG methylation;
3. The isozymes of BspQI include LguI, PciSI, and SapI;
4. BspQI exhibits star activity in systems with low salt ion concentrations;
5. Minimize the exposure time of enzymes above -20 °C as much as possible.