

## **BspQI**

Catalog Number	LDG0016RG
Package	2,500 U

For full product information, images and publications, please visit our website.



### **Overview**

#### **Product Note**

- The volume of restriction endonuclease added should not exceed 1/10 of the reaction volume to avoid star activity.
- DNA substrate should not contain phenol, chloroform, ethanol, EDTA, detergents, or high concentrations of salt, as these can affect the activity of BspQI enzyme.

## Components

Specification	Item	Amount
2500 U	BspQl (10 U/μL)	(1 vial) 250 μL
2300 0	10× R Buffer	(2 vials) 1.25 mL

## **Specifications**

**Expression system** 

Escherichia coli

**Buffer** 

20 mM Tris-HCl, 500 mM KCl, 0.1 mM EDTA, 1 mM DTT, 500 µg/ml rAlbumin, 50% Glycerol, 0.1% Triton X-100, pH 7

**Endotoxin level** 

<0.1 EU per 1 mL of the enzyme by the LAL method.

Concentration

 $10~U/\mu L$ 

**Activity** 

One unit of BspQI is defined as the amount of enzyme that cleave 1 µg \( \DNA \) in a total reaction volume of 50 μL at 50°C for 1h.

Mycoplasma

Not detected

Tainan Headquarter

**Innovation & Research Center** 

**CLD Center** 



**Form** 

Liquid

## **Background**

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BspQI is a restriction enzyme derived from bacteria that recognizes and cuts specific DNA sequences. Its recognition sequence is 5'-GCTCTTC-3', with the cleavage site located downstream from the recognition sequence. BspQI is commonly used in molecular biology applications such as genome editing, cloning, and DNA mapping due to its ability to precisely cut DNA at defined sites, facilitating further analysis and manipulation of the DNA molecules.

### Instruction

#### **Shipping**

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

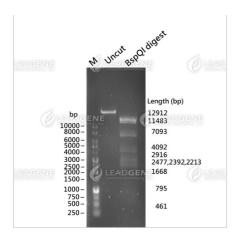
#### Stability & Storage

This product is stable after storage at:

 -20°C for long-term storage under sterile conditions.

# **Image**





The enzyme activity of BspQI In a 50  $\mu$ L reaction system, 1  $\mu$ g of  $\lambda$ DNA was treated with the 1U/ $\mu$ L of BspQI. The reaction was incubated at 50 °C for 60 minutes, followed by incubation at 80 °C for 20 minutes to inactivate BspQI.

M: DNA marker

Uncut: The control group was not

treated with BspQI.

BspQI disgest: The sample group was

treated with BspQI.

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