

## Product Description

BspQ I is a Type IIP restriction endonuclease expressed in *Escherichia coli* carrying the BspQ I gene cloned from *Bacillus sphaericus* (X.S. Pan). Its recognition and cleavage sequences are shown below:

5' ...GCTCTTC(N) ↓ ...3'

3' ...CGAGAAG(NNNN) ↑ ...5'

## Components

Components	BR1G109-01 1,000 U	BR1G109-02 2,000 U	BR1G109-03 5,000 U
BspQ I (10 U/μL)	1×0.1 mL	1×0.2 mL	1×0.5 mL
10×BspQ I Reaction Buffer	1×1 mL	2×1 mL	3×1 mL

## Unit Definition

One unit is defined as the amount of enzyme required to completely digest 1 μg of λDNA in 1 h at 50°C.

## Storage

Store at -20±5°C.

## Notes

1. For research use only. Not for use in clinical diagnosis.
2. Mix thoroughly before use. Avoid repeated freeze-thaw cycles.
3. The volume of restriction endonuclease added should not exceed one-tenth of the total reaction volume.
4. Scope of application: Linearization of in vitro transcription templates. Digestion of plasmids to prepare linearized DNA fragments containing poly(A/T/G/C) ends.
5. Digestion for longer than 3 h is not recommended, as prolonged incubation may lead to star activity.

## Prepare Reaction Mix

Prepare the reaction mix on ice as follows:

Components	Volume per Reaction	Concentration in Master Mix
10×BspQ I Reaction Buffer	5 μL	1×
BspQ I (10 U/μL)	1 μL	0.2 U/μL
DNA Substrate	1 μg	—
ddH <sub>2</sub> O	To 50 μL	—

## Reaction Programe

Incubate at 50°C for 1 h. Heat inactivation: incubate at 80°C for 20 min.