

## Product Description

BsrF I is a Type IIP restriction endonuclease expressed in *Escherichia coli* carrying the BsrF I gene cloned from *Bacillus stearothermophilus* CPW16. It is sensitive to CpG methylation in mammalian genomic DNA. Its recognition and cleavage sequences are shown below:

5'... R ↓ CCGGY ...3'

3'... YGGCC ↑ R ...5'

## Components

Components	BR1G107-01 1,000 U	BR1G107-02 2,000 U	BR1G107-03 5,000 U
BsrF I (10 U/μL)	1×0.1 mL	1×0.2 mL	1×0.5 mL
10× Cut-Buffer	1×1 mL	1×1 mL	3×1 mL

## Unit Definition

One unit is defined as the amount of enzyme required to completely digest 1 μg of pBR322 DNA in 1 h at 37°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. Suitable for digestion of genomic DNA, plasmid DNA, and PCR products.
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× Cut-Buffer	5 μL	1×
BsrF I (10 U/μL)	1 μL	0.2 U/μL
DNA Substrate	1 μg	—
ddH <sub>2</sub> O	To 50 μL	—

## Reaction Programme

Incubate at 37°C for 1 h.