Version: M18I26V1.0

BbsI

Cat. No. : RK21130

Product Components

Components	Concentration	Component Number	500 U
BbsI	20,000 U/mL	RM21631	25 μL
10X Buffer CutS	10X	RM20103	1.25 mL

Product Description

Restriction Site

5'...G A A G A C $(N)_2$ ...3'

3'...C T T C T G $(N)_6$ ...5'

Unit Definition

One unit is defined as the amount of enzyme required to digest 1 μg of λDNA in 1 hour at 37°C in a total reaction volume of 50 μL.

Storage

-20°C

Reaction Conditions

1X Buffer CutS, incubate at 37°C.

Quick Cut

Yes. This enzyme will digest unit substrate in 5-15 minutes under recommended reaction conditions.

Heat Inactivation

80°C for 20 min.

Instructions

Recommended Protocol for Digestion

Components	Volume
ddH_2O	Up to 50 μL
10X Buffer CutS	5 μL
DNA*	1 μg
BbsI	1 μL

* Note: DNA substrates should be free of phenol, chloroform, ethanol, EDTA, detergents or high concentrations of salt, otherwise it will affect the enzyme activity.

- Incubate at 37°C for 5-15 min.
- Inactivated at 80°C for 20 min. (Optional)

Note

1. Enzyme

- Keep on ice when not in the freezer.
- Should be the last component added to reaction.

2. DNA

- Should be free of contaminants such as phenol, chloroform, alcohol, EDTA, detergents or excessive salts. Extra wash steps during purification are recommended.
- Methylation of DNA can inhibit digestion with certain enzymes.
- Methylation Sensitivity

Dam	not sensitive
Dcm	not sensitive
CpG	not sensitive
EcoKI	not sensitive
EcoBI	not sensitive

3. Reaction Volume

- A 50 μL reaction volume is recommended for digestion of 1 μg of substrate.
- Enzyme volume should not exceed 10% of the total reaction volume to prevent star activity due to excess glycerol.
- Additives in the restriction enzyme storage buffer (e.g., glycerol, salt) as well as contaminants found in the substrate solution (e.g., salt, EDTA, or alcohol) can be problematic in smaller reaction volumes.