Restriction Endonuclease

SibEnzyme®

BstMC I

Recognition Sequence:

CGRY↓CG
GC↑YRGC

S

E071

500 units

5,000 u/ml

Lot:

Exp:

Store at -20°C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	100	75-100	10-25	10-25	50-75	100

50°C 80°C B λ BSA

For more details scen the code

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CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus MC.*

Supplied in:
10 mM Tris-HCl (pH 7.5), 200 mM KCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 200 µg/ml BSA; 50% glycerol.

Reaction Conditions:
1X SE-Buffer B, BSA (100 µg/ml). Incubate at 50° C.

1X SE-Buffer B (pH 7.6 @ 25° C):
10 mM Tris-HCl
10 mM $MgCl_2$ 1 mM DTT

Heat Inactivation:
Enzyme is inactivated by incubation at 80°C for 20 minutes.

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 50° C in a total reaction volume of 50 µl.
To obtain 100% activity, BSA should be added to the 1 x reaction mix to a final concentration of 100 µg/ml.

Quality Control Assays
Ligation: After 5-fold overdigestion with BstMC I, > 90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

16-Hour Incubation: A 50 µl reaction containing in 1 µg of DNA and 10 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.
Do not use BSA for long incubation.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 5 units of restriction endonuclease for 3 hours.

Enzyme Properties:
When using a buffer other than the optimal (Supplied) SE-Buffer, it may be necessary to add more enzymes to achieve complete digestion.

Reagents Supplied with Enzyme:
10X SE Buffer B, BSA (10 mg/ml).