Restriction Endonuclease

BslF I

Recognition Sequence: GGGAC(N)$_{10}$↓ / CCCTG(N)$_{14}$↑

S **E479**

100 units

1,000 u/ml

Lot:

Exp:

Store at -20°C

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

37°C 80°C Y λ BSA

For more details scen the code

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CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus Fl.*

Supplied in:
10 mM Tris-HCl (pH 7.5), 250 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 50% glycerol.

Reaction Conditions:
1X SE-Buffer Y, BSA (100 µg/ml). Incubate at 37° C.

1X SE-Buffer Y (pH 7.9 @ 25° C):
33 mM Tris-Ac 66 mM KAc
10 mM MgAc 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 37° C in a total reaction volume of 50 µl.
To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 µg/ml.

Quality Control Assays

Ligation: After 3-fold overdigestion with BslFI I, > 90% of the DNA fragments can be ligated and 95% of these can be recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 2 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.
High enzyme concentration may result in star activity.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 1 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 Y, BSA (10 mg/ml).

There is DNA-methyltransferase activity in presence of SAM. It is maximum at 48°C. In presence of 10mM $MgCl_2$ enzyme both modifies and hydrolyzes DNA. If $MgCl_2$ is absent enzyme modifies DNA only. And that DNA become proof against BslF I.

BslF I also cleaves the sequence GGGAC(11/15).