Restriction Endonuclease

SibEnzyme®

BstAP I

Recognition Sequence: GCANNNN↓NTGC
CGTN↑NNNNACG

S

E259

200 units

5,000 u/ml

Lot:

Exp:

Store at -20°C

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

60°C 80°C W λ

For more details scen the code

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CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus AP.*

Supplied in:
10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0,1 mM EDTA, 1 mM DTT, 200 µg/ml BSA, and 50% glycerol.

Reaction Conditions:
1X SE-Buffer W. Incubate at 60° C.

1X SE-Buffer W (pH 8.5 @ 25° C):
10 mM Tris-HCl 100mM NaCl
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 60° C in a total reaction volume of 50 µl.

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

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 5 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.
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 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 W.

At 37° C activity is 50% from maximum.
The minimum number of units that resulted in complete digestion of 1 µg of substrate DNA in 16 hours is 0.5.