Restriction Endonuclease

SibEnzyme®

Bse3D I

Recognition Sequence: GCAATGNN↓
CGTTAC↑NN

S

E253

200 units

5,000 u/ml

Lot:

Exp:

Store at -20°C

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

60°C 80°C G λ

For more details scen the code

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CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus 3D.*

Supplied in:
10 mM Tris-HCl (pH 7.5), 200 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 50% glycerol.

Reaction Conditions:
1X SE-Buffer G. Incubate at60° C.

1X SE-Buffer G (pH 7.6 @ 25° C):
10 mM Tris-HCl 50 mM 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 at60° C in a total reaction volume of 50 µl.

Quality Control Assays
Ligation:After 5-fold overdigestion with Bse3D I, ~90% of the DNA fragments can be ligated and recut.

16-Hour Incubation:A 50 µl reaction containing 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.

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 G.

At 37° C activity is 5% from maximum.