Restriction Endonuclease

SibEnzyme®

BstDE I

Recognition Sequence:

C↓TNAG
GANT↑C

XS

E227m
500 units
10,000 u/ml

Lot:
Exp:
Store at -20°C

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

60°C | 80°C | G | λ | minimal

For more details scen the code

Ph/F+7(383)333-6853
info@sibenzyme.com
www.sibenzyme.com

CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus DE.*

Supplied in:
10 mM Tris-HCl (pH 7.5), 100 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 50% glycerol.

Reaction Conditions:
1X SE-Buffer G. Incubate at 60° 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 at 60° C in a total reaction volume of 50 µl.

Quality Control Assays
Ligation: After 10-fold overdigestion with BstDE I, 90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 20 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 10 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 10% from maximum.