



BstNS I

Recognition Sequence:

S

E251
200 units
10.000 u/ml

RCATG↓Y Y↑GTACR

Lot: Exp:

Store at -20°C

 SE-Buffers
 B
 G
 O
 W
 Y
 ROSE

 %Activity
 100
 50-75
 10-25
 10-25
 75-100
 50

37°C





For more details scen the code



CERTIFICATE OF ANALYSIS

Source: Bacillus stearothermophilus NS.

Supplied in:

 $\overline{10}$ mM Tris-HCl (pH 7.5), 250 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 100 µg/ml BSA, 50% glycerol.

Reaction Conditions:

1X SE-Buffer B, BSA (100 $\mu g/ml).$ Incubate at 37° C.

1X SE-Buffer B (pH 7.6 @ 25° C):

10 mM Tris-HCl 10 mM MgAc 1 mM DTT

Heat Inactivation:

Enzyme is inactivated by incubation at 65°C for 20 minutes.

<u>Unit Definition</u>:One unit is defined as the amount of enzyme required to digest 1 μ g of Lambda in 1 hour at 37°C in a total reaction volume of 50 μ l. To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 μ g/ml.

Quality Control Assays

<u>Ligation</u>:After 10-fold overdigestion with BstNS I, more than 90% of the DNA fragments can be ligated 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.

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 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 B, BSA (10 mg/ml).