

Restriction  
Endonuclease



# BstEN I

Recognition  
Sequence:

CCTNN↓NNNAGG  
GGANN↑NNTCC

S

E103

200 units  
5,000 u/ml

Lot:

Exp:

Store at -20°C

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

65°C

80°C

Y

λ

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus* EN.

Supplied in:

10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0.1 mM EDTA,  
7 mM 2-mercaptoethanol, 200 µg/ml BSA, 50%  
glycerol.

Reaction Conditions:

1X SE-Buffer Y. Incubate at 65 °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 65°C in a total reaction volume of 50 µl.

Quality Control Assays

Ligation: After 5-fold overdigestion with BstEN I, ~60%  
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 Y.

Not blocked by overlapping Dcm methylation  
(C<sup>m</sup>CWGG):

CCTGGNNNAGG, or CCTNNNCCAGG.