

Restriction  
Endonuclease



# BssNA I

Recognition  
Sequence:

GTA↓TAC  
CAT↑ATG

XS

**E261m**  
200 units  
10,000 u/ml

Lot:  
Exp:  
**Store at -20°C**

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

37°C

No

W

λ

BSA

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus NA.*

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

Reaction Conditions:  
1X SE-W, BSA (100 µg/ml). Incubate at 37° C.

1X SE-Buffer W (pH 8.5 @ 25° C):  
10 mM Tris-HCl    100 mM NaCl  
10 mM MgCl<sub>2</sub>    1 mM DTT

Heat Inactivation:  
NO (80° C for 20 minutes).

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of pUC19 DNA in 1 hour at 37° C in a total reaction volume of 50 µl. To obtain 100% activity, BSA should be added the 1x reaction mix to a final concentration of 100 µg/ml.

### Quality Control Assays

Ligation: After 10-fold overdigestion with BssNA I, > 90% of the DNA fragments can be ligated 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.

No using BSA for long incubation.

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 20 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, BSA (10 mg/ml).