



# BstBA I

Recognition Sequence:

S E237
500 units
10.000 u/ml

YAC↓GTR RTG† CAY

> Lot: Exp:

Store at -20C

 SE-Buffers
 B
 G
 O
 W
 Y
 ROSE

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

65°C 80°C W λ BSA

For more details scen the code



## **CERTIFICATE OF ANALYSIS**

Source: Bacillus stearothermophilus BA.

#### Supplied in:

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

#### **Reaction Conditions:**

1X SE-Buffer W, BSA (100 μg/ml). Incubate at 65°C.

## 1X SE-Buffer W(pH 8.5 @ 25° C):

10 mM Tris-HCl 100 mM NaCl 10 mM MgCl, 1 mM DTT

### **Heat Inactivation:**

Enzyme is inactivated by incubation at 80°C for 20 minutes.

<u>Unit Definition</u>:One unit is defined as the amount of enzyme required to digest 1  $\mu$ g of Lambda DNA in 1 hour at 65°C in a total reaction volume of 50  $\mu$ l. To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100  $\mu$ g/ml.

#### **Quality Control Assays**

 $\underline{\text{Ligation}}. After \ 10-fold \ overdigestion \ with \ BstBAI, \ more than 90\% \ of the \ DNA \ fragments \ can be \ ligated \ recut.$ 

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.

No using 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 W, BSA (10 mg/ml).

Blocked by CG methylation.