

Restriction  
Endonuclease



# BstSF I

Recognition  
Sequence:

C↓TRYAG  
GAYRT↑C

S

**E197**

200 units  
5,000 u/ml

Lot:

Exp:

Store at **-20°C**

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

60°C

No

O

λ

BSA

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus SF*.

Supplied in:

10 mM Tris-HCl (pH 7.5), 100 mM KCl, 0.1 mM EDTA,  
7 mM 2-mercaptoethanol, 200 µg/ml BSA, 50%  
glycerol.

Reaction Conditions:

1× SE-Buffer O, BSA (100 µg/ml). Incubate at 60° C.

1X SE-Buffer O (pH 7.6 @ 25° C):

50 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 Lambda DNA in 1 hour at 60° C in a total reaction volume of 50 µl. To obtain 100% activity, BSA should be added to the 1 x reaction mix to a final concentration of 100 µg/ml.

Quality Control Assays

Ligation: After 3-fold overdigestion with BstSF I, 95% of the DNA fragments can be ligated and recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 5 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 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 O, BSA (10 mg/ml).