Restriction Endonuclease

SibEnzyme®

Bst4C I

Recognition Sequence:

ACN↓GT
TG↑NCA

S

E265

500 units

10,000 u/ml

Lot:

Exp:

Store at -20°C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	75-100	75-100	10-25	25-50	100	50

65°C | No | Y | λ

For more details scen the code

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CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus 4C.*

Supplied in:
10 mM Tris-HCl (pH 7.5), 200 mM NaCl, 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:
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 65° C in a total reaction volume of 50 µl.

Quality Control Assays
Ligation: After 10-fold overdigestion with Bst4C I, ~50% of the DNA fragments can be ligated and recut. In the presence of 10% PEG ligation is better.

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.

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 Y.

Bst4C I produces DNA fragments that have single-base 3' extension which are difficult to ligate.