Restriction Endonuclease

SibEnzyme®

BstV2 I (BbsI BpiI)

Recognition Sequence: GAAGAC(N)$_2$↓
CTTCTG(N)$_6$↑

L

E298

1,000 units

5,000 u/ml

Lot: see label

Exp: see label

Store at -20C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	75-100	75-100	25-50	25-50	100	70

55°C | 65°C | Y | λ | BSA

For more details scan the code

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CERTIFICATE OF ANALYSIS

Source: *Bacillus stearothermophilus V2.*

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, BSA (100 µg/ml). Incubate at 55 °C.

1X SE-Buffer Y (pH 7.9 @ 25 °C)

33 mM Tris-Ac	66 mM KAc
10 mM Mg(Ac)$_2$	1 mM DTT

Heat Inactivation:
Enzyme is inactivated by incubation at 65 °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 55 °C in a total reaction volume of 50 µl.
To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 µg/ml.

Quality Control Assays
Ligation: After 5-fold overdigestion with BstV2 I, more than 90% 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.
Do not use 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 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, BSA (10 mg/ml).