Restriction Endonuclease

SibEnzyme®

Bar I

Recognition Sequence: ↓(N)$_7$GAAGNNNNNNTAC(N)$_{12}$↓
↑(N)$_{12}$CTTCNNNNNNATG(N)$_7$↑

S

E547

100 units

1,000 u/ml

Lot:

Exp:

Store at -20C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	0-10	0-10	25-50	50-75	10-25	40

37°C 65°C 2K T7

For more details scen the code

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CERTIFICATE OF ANALYSIS

Source: *Bacillus sphaericus*.

Supplied in:
20 mM KH_2PO_4(pH 7.4), 100 mM KCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 200 µg/ml BSA, 50% glycerol.

Reaction Conditions:
1X SE-Buffer 2K. Incubate at 37° C.

1X SE-Buffer 2K (pH 7.6 @ 25° C):
10 mM Tris-HCl 200 mM KCl
10 mM $MgCl_2$ 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 T7 DNA in 1 hour at37° C in a total reaction volume of 50 µl.

Quality Control Assays
Ligation: After 2-fold overdigestion with Bar I, 90% of the DNA fragments can be ligated, Of these 95% can be recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 2 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 1 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 2K.

Blocked by overlapping Dam methylation(G^{m}ATC):
TCCGGATC and GATCCGGA.