Restriction Endonuclease

SibEnzyme®

Set I

Recognition Sequence:

ASST↓
↑TSSA

S

E537
200 units
5,000 u/ml

Lot:
Exp:
Store at -20C

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

55°C | 80°C | Y | dsDNA | RR

For more details scen the code

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CERTIFICATE OF ANALYSIS

Source: *An E.coli strain that carries the cloned Set I gene from Streptomyces werraensis 37.*

Supplied in:
10 mM Tris-HCl (pH 7.6), 100 mM NaCl, 0.1 mM EDTA, 1 mM DTT, 50% glycerol.

Reaction Conditions:
1X SE-Buffer Y. Incubate at 55° 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:
Enzyme is inactivated by incubation at 80°C for 20 minutes.

Unit Definition:One unit is defined as the amount of enzyme required to cleave 1 pmol of the double-stranded oligonucleotide of the below indicated structure in 1 hour at 55° Cin a total reaction volume of 20 µl.

Quality Control Assays
Ligation:After 5-fold overdigestion with enzyme, ~50% of the pBR322 DNA fragments can be ligated with T4 DNA Ligase 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.

Note!
SetI cleaves a canonical site and several other sites with a weaker activity.
In the case of long incubation with SetI DNA can be digested to small oligos.

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.