

Restriction
Endonuclease



SmiM I

Recognition
Sequence:

CAYNN↓NNRTG
CTRNN↑NNYAC

S

E293

500 units
5,000 u/ml

Lot:

Exp:

Store at -20°C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	10-25	10-25	75-100	100	10-25	60

37°C

65°C

W

λ

For more details
scan the code



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CERTIFICATE OF ANALYSIS

Source: *Sphingobacterium mizutae* M.

Supplied in:

10 mM Tris-HCl (pH 7.5), 250 mM NaCl, 0, 1 mM EDTA,
7 mM 2-mercaptoethanol, 200 µg/ml BSA, and 50%
glycerol.

Reaction Conditions:

1XSE-Buffer W. Incubate at 37° C.

1X SE-Buffer W(pH 8.5 @ 25° C):

10 mM Tris-HCl 100 mM NaCl
10 mM MgCl₂ 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 37° C in a total reaction volume of 50 µl.

Quality Control Assays

Ligation:After 5-fold overdigestion with SmiM I, 90%
of the DNA fragments can be ligated with T4 DNA Ligase
and recut.

16-Hour Incubation:A 50 µl reaction containing 1 µg of
DNA and 10 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 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 W.