

Restriction Endonuclease**Lmn I****E593**

SibEnzyme
SibEnzyme Ltd., Russia
Ph: +7 383 333 4991
Fax :+7 383 333 6853
info@sibenzyme.com
www.sibenzyme.com

**50 u****1000 u/ml****Lot: 1****Store at -20°C****Recognition Sequence:**

5'... GCTCCN↓ ...3'
3'... CGAG↑GN ...5'

Source: *Lysinibacillus manganicus* An22**Supplied in:**

20 mM Tris-HCl (pH 7.5); 250 mM NaCl;
100 µg/ml BSA; 7 mM 2-mercaptoethanol;
50% glycerol.

Reaction Conditions:

1×SEBuffer B.

Incubate at **37°C**.

Warranty period for the enzyme storage at-20°C is one year from the date of the last assay indicated on the enzyme vial.

1×SEBuffer B (pH 7.6 @ 25°C)10 mM Tris-HCl 10 mM MgCl₂ 1 mM DTT**Unit Definition:** One unit is defined as the

amount of enzyme required to digest 1 µg

of λ DNA in 1 hour at 37°C in a total

reaction volume of 50 µl.

Quality Control Assays

Ligation: After 3-fold overdigestion with Lmn I, >90% of λ DNA fragments can be ligated with T4 DNA Ligase and recut.

16-Hour Incubation:

A 50 µl reaction containing 1 µg of λ 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- and double-stranded oligonucleotide was observed after incubation with 1 units of enzyme for 3 hours.

Enzyme Properties**Activity in SEBuffers:**

SEBuffer B **100%**
SEBuffer G 75-100%
SEBuffer O 50-75%
SEBuffer W 50-75%
SEBuffer Y 75-100%
SEBuffer ROSE 80%

When using a buffer other than the optimal (supplied) SEBuffer, it may be necessary to add more enzyme to achieve complete digestion.

Heat Inactivation:**Yes** (65°C for 20 minutes)**Reagents Supplied with Enzyme:**

10×SEBuffer B

CERTIFICATE OF ANALYSIS