



Mnl I

Recognition Sequence:

S E481 500 units

500 units 10,000 u/ml CCTC(N), I

Lot: Exp:

Store at -20C

SE-Buffers B G O W Y ROSE

%Activity 75-100 100 25-50 25-50 75-100 100

37°C 65°C G λ RR BSA

For more details scen the code



CERTIFICATE OF ANALYSIS

<u>Source</u>: An E.coli strain that carries the cloned Mnl I gene from Moraxella nonliquefaciens.

Supplied in:

10 mM Tris-HCl (pH 7.6), 200 mM NaCl, 0.1 mM EDTA, 1 mM DTT, 200 µg/ml BSA, 50% glycerol.

Reaction Conditions:

1X SE-Buffer G, BSA (100 $\mu g/ml).$ Incubate at 37° C.

<u>1X SE-Buffer G (pH 7.6 @ 25° C)</u>:

10 mM Tris-HCl 50 mM NaCl 10 mM MgCl₂ 1 mM DTT

Heat Inactivation:

Enzyme is inactivated by incubation at 65°C for 20 minutes.

<u>Unit Definition</u>:One unit is defined as the amount of enzyme required to digest 1 μ g of Lambda DNA in 1 hour at37°C in a total reaction volume of 50 μ l. To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 μ g/ml.

Quality Control Assays

Ligation: After 10-fold overdigestion with Mnl I, 50% of the DNA fragments can be ligated 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.

Do not use BSA for long incubation.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 10 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 G, BSA (10mg/ml).

Blocked by overlapping CG methylation: $CCT^{m}\underline{CG}$.