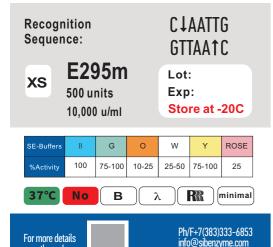




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Mfe I

scen the code



CERTIFICATE OF ANALYSIS

<u>Source</u>: An E.coli strain that carries the cloned Mfe I gene from Mycoplasma fermentans.

Supplied in:

10 mM Tris-HCl (pH 7.6), 50 mM NaCl, 0.1 mM EDTA, 1 mM DTT, $200~\mu g/ml$ BSA; 50%~glycerol

Reaction Conditions:

1x SE-Buffer B, BSA (100 µg/ml). Incubate at 37° C.

1X SE-Buffer G (pH 7.6 @ 25° C):

10 mM Tris-HCl 10 mM MgCl₂ 1 mM DTT

Heat Inactivation:

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

To obtain 100% activity, BSA should be added to the 1 x reaction mix to a final concentration of 100 μ g/ml. Do not use BSA for long incubation.

Quality Control Assays

<u>Ligation</u>: After 20-fold overdigestion with Mfe I, \sim 90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

16-Hour Incubation: A 50 μl reaction containing in 1 μg of DNA and 20 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 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 B, BSA (10 mg/ml).