Restriction Endonuclease

SibEnzyme®

Mfe I

Recognition Sequence:

C↑AATTG
GTTAA↓C

S

E295T

50 reactions

50 µl

Lot: 10

Exp: 04/21

Store at -20C

37°C | No | ROSE+ | λ | PCR | TURBO

For more details scan the code

Ph/F +7(383)333-6853
info@sibenzyme.com
www.sibenzyme.com

CERTIFICATE OF ANALYSIS

Enzyme Properties:

1 µl of Turbo Mfe I cuts 1 µg of DNA in 1x SE-Buffer ROSE+ in 10 min (assayed on Lambda and plasmid DNA). A short time of DNA digestion requires high quality purification of DNA sample (PCR fragments should be purified after amplification).

Please note that supercoiled plasmid DNA and PCR fragments may have varying rates of cleavage and sometimes need more time to be completely digested.

Standard protocol of Turbo reaction:

20 µl of the reaction volume:

10x SE-Buffer ROSE+	- 2 µl
DNA	- 0.2-1 µg
Nuclease-free water	- to 20 µl

+ 1 µl of Turbo Mfe I

Mix by pipette tip carefully.

Incubate at 37°C for 10 min.

Description: Turbo Mfe I is used for short time (10 min) DNA digestion in universal (ROSE+) SE-Buffer.

Source: 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, 200 µg/ml BSA, 1mM DTT, 50% glycerol.

Reaction Conditions:
1x SE-Buffer ROSE+. Incubate at 37°C.

SE-Buffer ROSE+ is a modified universal ROSE (Reaction Original SibEnzyme) Buffer, specially designed for Restriction Endonucleases that require BSA to obtain 100% activity. The concentration of BSA in 1x ROSE+ Buffer is 100 µg/ml.

Heat Inactivation:
Enzyme is not inactivated by incubation at 80°C for 20 min.

Quality Control Assays
Ligation: After digestion with 1 µl of Turbo Mfe I, approximately 90% of the DNA fragments can be ligated with high-activity T4 DNA Ligase and recut.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 1 µl of restriction endonuclease for 3 hours.

Reagents Supplied with Enzyme:
10x SE-Buffe ROSE+.

Applications:
-Fast DNA analysis
-Fast preparation of vectors for cloning
-Double digestion