Restriction Endonuclease

SibEnzyme®

BstDE I

Recognition Sequence:

C↓TNAG
GANT↑C

S

E227T

50 reactions

50 µl

Lot: 36

Exp: 04/21

Store at -20°C

60°C | 80°C | ROSE | λ | TURBO

For more details scan the code

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CERTIFICATE OF ANALYSIS

Enzyme Properties:

1 µl of Turbo BstDE I cuts 1 µg of DNA in 1 x 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:

10 x SE Buffer ROSE - 2 µl

DNA - 0,2-1 µg

Nuclease-free water - to 20 µl

+ 1 µl of Turbo BstDE I

Mix by pipette tip carefully.

Incubate at 60°C for 10 min.

Incubation at 37°C results in 50-75% activity.

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

Source: Bacillus stearothermophilus DE

Supplied in: 10 mM Tris-HCl (pH 7.5), 100 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 50% glycerol.

Reaction Conditions:

1 x SE-Buffer ROSE. Incubate at 60°C.

Reaction Original SibEnzyme (ROSE) Buffer is a specially designed universal reaction buffer for the most Restriction Endonucleases. ROSE Buffer is perfect for DNA cleavage with SE Turbo Restriction Endonucleases and for double digestion.

Heat Inactivation:

Enzyme is inactivated by incubation at 80°C for 20 minutes.

Quality Control Assays

Ligation: After digestion with 1 µl of Turbo BstDE 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:

10 x SE-Buffer ROSE.

Applications:

-Fast DNA analysis

-Fast preparation of vectors for cloning

-Double digestion

Certified for human genome studies:
http://science.sibenzyme.com/article8_article_31_1.p
html.