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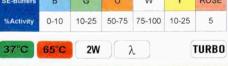
Recognition Sequence: **GGTAC** † C E047T Lot: 49

Exp: 05/19 1.000 units Store at -20C 20,000 u/ml SE-Buffers

Restriction

Endonuclease

Bsp19 I



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CERTIFICATE OF ANALYSIS

Description: Turbo Bsp 191 can be used for short time (5-10 min) DNA digestion as well as for standard reaction. The reaction can be performed using optimal or universal (ROSE) Buffer, Buffer ROSE is perfect for double digestion.

Source: Bacillus species 19

Supplied in: 10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 200 µg/ml BSA, 50% glycerol.

Reaction Conditions:

1 x SE-Buffer 2W or 1 x SE-Buffer ROSE. Incubate at 37°C.

1 x SE-Buffer 2W (pH 8.5@ 25°): 20 mM Tris-HCl 200 mM NaCl

10 mM MaCl. 1 mM DTT Heat Inactivation: Enzyme is inactivated by incubation at 65°C for 20 minutes.

enzyme required to digest 1 μ g of λ DNA in 1 hour at 37°C in a total reaction volume of 50 µl. Quality Control Assays

Unit Definition: One unit is defined as the amount of

Ligation: After 20-fold overdigestion with Bsp19 I, 95% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

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

16-Hour Incubation: A 50 µl reaction containing 1 µg

of DNA and 40 units of enzyme incubated for 16 hours

was observed after incubation with 20 units of restriction endonuclease for 3 hours.

Reagents Supplied with Enzyme: 10 x SE-Buffer 2W, 10 x SE-Buffer ROSE Applications:

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

Turbo DNA Digestion:

Enzyme Properties: 1 µl of Turbo Bsp191 cuts 1 µg of DNA in 1 x SE-Buffer 2W or universal 1 x SE-Buffer ROSE in 5-10 min (see the protocol below). Short time DNA digestion requires high quality purification of DNA sample. This enzyme

(1-16 hours) as well. Turbo reaction protocol: 20 µl of the reaction volume:

Reaction Buffer (x10) - 2 µl Plasmid DNA - 1-2 μl (up to 1 μg) or - 5-10 μl (~0,2 μg) PCR product - up to 20 µl Sterile water + 1 µl of Turbo Restriction Endonuclease Incubate at 37°C for 5-10 min.

can digest DNA at standard incubation time