BsrDI



1-800-632-7799 info@neb.com www.neb.com





200 units

2.000 U/ml Lot: 0081206

Store at -20°C Exp: 6/14

Recognition Site:

5′... G C A A T G N N ... 3′ 3'... CGTTACNN...5'

Source: Bacillus stearothermophilus D70 (Z. Chen)

Supplied in: 100 mM NaCl, 10 mM Tris-HCl (pH 7.6), 0.1 mM EDTA, 1 mM dithiothreitol, 200 µg/ ml BSA and 50% glycerol.

More Units



Reaction Conditions: 1X NEBuffer 2.

Reagents Supplied with Enzyme:

10X NEBuffer 2, 100X BSA.

supplemented with 100 µg/ml BSA. Incubate at 65°C.

1X NEBuffer 2:

50 mM NaCl 10 mM Tris-HCI 10 mM MgCl_a 1 mM DTT pH 7.9 @ 25°C

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 μ g of λ DNA in 1 hour at 65°C in a total reaction volume of 50 µl.

Diluent Compatibility: Diluent Buffer A 50 mM KCI, 10 mM Tris-HCI, 0.1 mM EDTA, 1 mM DTT, 200 µg/ml BSA and 50% glycerol (pH 7.4 @ 25°C).

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Quality Control Assays

Ligation: After 10-fold overdigestion with BsrDI. > 95% of the DNA fragments can be ligated with T4 DNA Ligase (at a 5' termini concentration of 1–2 μM) at 16°C. Of these ligated fragments, > 95% can be recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 15 units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour with 1 unit of enzyme.

Exonuclease Activity: Incubation of 50 units of enzyme with 1 ug sonicated 3H DNA (105 cpm/ μg) for 4 hours at 65°C in 50 μl reaction buffer released < 0.1% radioactivity.

Enzyme Properties

Activity in NEBuffers

NEBuffer 1 50% NFBuffer 2 100% NEBuffer 3 50% NEBuffer 4 75%

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1 unit of enzyme.

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Activity in NEBuffers

NEBuffer 1 50%

NFBuffer 2 100%

NEBuffer 3 50% NEBuffer 4 75%

When using a buffer other than the optimal (supplied) NEBuffer, it may be necessary to add more enzyme to achieve complete digestion.

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μg) for 4 hours at 65°C in 50 μl reaction buffer

for 16 hours resulted in the same pattern of DNA

Survival in a Reaction: A minimum of 0.50 unit is required to digest 1 ug of substrate DNA in 16 hours.

Heat Inactivation: 80°C for 20 minutes.

Note: Not sensitive to *dam*, *dcm* or mammalian CpG methylation

Incubation at 37°C results in 30% activity.

= Time-Saver™ Qualified (See www.neb.com for details).

CERTIFICATE OF ANALYSIS

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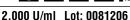


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R0574S

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