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Certificate of Analysis

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BstX I

Catalog No: 2118

Lot No: 2308003

Package Size: See Product Label

Concentration: 10 units/ μ l

Source: *Bacillus stearothermophilus* X I

Storage Conditions: Store at -20°C

Recognition/Cut Site

5'-CCANNNNN↓NTGG-3'

3'-GGTN↑NNNNNACC-5'

Unit Definition

One unit is the amount of enzyme required to completely digest 1 μ g of Lambda DNA in 1 hour at 55°C in a total

Heat Inactivation

65°C for 10 minutes

Reaction Temperature

55°C

Reaction Buffer

50 mM Tris-HCl (pH 7.5 at 37°C)

100 mM NaCl

10 mM MgCl₂

1 mM dithiothreitol (DTT)

100 μ g/ml bovine serum albumin*

*supplied separately

Assay Conditions

50 mM Tris-HCl (pH 7.5 at 37°C)

100 mM NaCl

10 mM MgCl₂

1 mM dithiothreitol (DTT)

100 μ g/ml bovine serum albumin

1 μ g lambda DNA

Incubation time is 1 hour at 55°C

Reaction volume of 50 μ l

Storage Buffer

10 mM Tris-HCl (pH 7.5)

50 mM KCl

0.1 mM EDTA

1 mM dithiothreitol

0.005% Triton X-100™

200 μ g/ml bovine serum albumin

50% (v/v) glycerol

Quality Control

Non-Specific Endonuclease: 10, 20, and 30 units of BstX I were incubated with λ DNA for 5 hours at 55°C and compared to a standard 4 unit, 1 hour assay.

3'-Exonuclease: 2, 5, 10, 15, and 20 units of BstX I were incubated with [³H] labeled 3'-ends of Lambda/Taq I DNA fragments for 1 hour at 55°C.

5'-Exonuclease/5'-Phosphatase: 2, 5, 10, 15, and 20 units of BstX I were incubated with [γ -³²P] labeled 5' – ends of Lambda/Hae III DNA fragments for 1 hour at 55°C.

Nicking: 10, 20, and 30 units of BstX I were incubated with pBR322 DNA for 5 hours at 55°C.

Ligation/Recut: 2 units of BstX I per μ g of Lambda DNA were incubated for 1 hour at 55°C. Resulting fragments were ligated with T4 DNA Ligase and recut with BstX I.

For more information or to re-order, please visit www.chimerx.com