



6143 North 60th Street
Milwaukee, WI 53218
www.chimerx.com

Certificate of Analysis

Telephone: (414) 535-9506
Toll Free: (800) 626-7833
Fax: (414) 535-9508
Web Support: chimerx.com/support
Email: info@chimerx.com

Dde I

Catalog No: 2140

Lot No: 2207005

Package Size: See Product Label

Concentration: 10 units/ μ l

Source: *Desulfovibrio desulfuricans*

Storage Conditions: Store at -20°C

Recognition/Cut Site

5'-C↓TNAG-3'

3'-GANT↑C-5'

Unit Definition

One unit is the amount of enzyme required to completely digest 1 μ g of Lambda DNA in 1 hour at 37°C.

Reaction Temperature

37°C

Heat Inactivation

10 minutes at 65°C

Reaction Buffer

50 mM Tris-HCl (pH 7.5 at 37°C)

10 mM MgCl₂

100 mM NaCl

1 mM dithiothreitol (DTT)

100 μ g/ml bovine serum albumin*

*supplied separately

Storage Buffer

20 mM Tris-HCl (pH 8.0)

100 mM NaCl

0.1 mM EDTA

1 mM dithiothreitol (DTT)

0.2% Triton X-100™

50% (v/v) glycerol

Assay Conditions

50 mM Tris-HCl (pH 7.5 at 37°C)

10 mM MgCl₂

100 mM NaCl

1 mM dithiothreitol (DTT)

100 μ g/ml bovine serum albumin

1 μ g Lambda DNA

Incubation time is 1 hour 37°C

Reaction volume is 50 μ l

Quality Control

Endonuclease: 20, 35, and 50 units of Dde I were incubated with Lambda DNA for 5 hours at 37°C and compared to a standard 4 units, 1 hour assay. A second assay was performed under the same conditions using pBR322 as the DNA.

3'-Exonuclease: 5, 10, 20, and 30 units of Dde I were incubated with [³H] labeled 3'-ends of Lambda/Taq I DNA fragments for 1 hour at 37°C.

5'-Exonuclease: 5, 10, 20, and 30 units of Dde I were incubated with [γ - ³²P] labeled 5' - ends of Lambda/Hae III DNA fragments for 1 hour at 37°C.

Ligation: 4 units of Dde I per μ g of Lambda DNA were incubated for 1 hour at 37°C. Resulting fragments were ligated with T4 DNA Ligase and recut with Dde I.