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## Certificate of Analysis

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## Acc I

Catalog No: 2000

Lot No: 2309003

Package Size: See Product Label

Concentration: 10 units/ $\mu$ l

Source: *Acinetobacter calcoaceticus*

Storage Conditions: Store at -20°C

### Recognition/Cut Site

5'-GT↓MKAC-3'

3'-CAKM↑TG-5'

### Unit Definition

One unit is the amount of enzyme required to completely digest 1  $\mu$ g of lambda DNA in 1 hour at 37°C in a total reaction volume of 50  $\mu$ l.

### Heat Inactivation

10 minutes at 80°C

### Reaction Temperature

37°C

### Reaction Buffer

20 mM Tris-OAc (pH 7.5 at 37°C)

50 mM KOAc

10 mM MgOAc

1 mM dithiothreitol (DTT)

100  $\mu$ g/ml bovine serum albumin\*

\*supplied separately

### Assay Conditions

20 mM Tris-OAc (pH 7.5 at 37°C)

50 mM KOAc

10 mM MgOAc

1 mM dithiothreitol (DTT)

100  $\mu$ g/ml bovine serum albumin

1  $\mu$ g lambda DNA

Incubation time is 1 hour at 37°C

Reaction volume is 50  $\mu$ l

### Storage Buffer

50 mM Tris-HCl (pH 7.5)

0.1 mM EDTA

10 mM  $\beta$ -mercaptoethanol

500  $\mu$ g/ml bovine serum albumin

0.1% Triton X-100™

50% (v/v) glycerol

### Quality Control

**Non-Specific Endonuclease:** 10, 20, and 30 units of Acc I were incubated with Lambda DNA for 5 hours at 37°C and compared to a standard 4 unit, 1 hour assay. A second assay was performed under the same conditions using pBR322 as the DNA.

**3'-Exonuclease:** 2, 5, 10, 15, and 20 units of Acc I were incubated with [<sup>3</sup>H] labeled 3'-ends of Lambda/Taq I DNA fragments for 1 hour at 37°C.

**5'-Exonuclease/5'-Phosphatase:** 2, 5, 10, 15, and 20 units of Acc I were incubated with [ $\gamma$ -<sup>32</sup>P] labeled 5'-ends of Lambda/Hae III fragments for 1 hour at 37°C.

**Ligation/Recut:** 2 units of Acc I per  $\mu$ g of SV40 DNA were incubated for 1 hour at 37°C. Resulting fragments were ligated with T4 DNA Ligase and recut with Acc I.

For more information or to re-order, please visit [www.chimerx.com](http://www.chimerx.com)