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## Certificate of Analysis

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## BssH II

Catalog No: 2115

Lot No: 2203011

Package Size: See Product Label

Concentration: 10 units/ $\mu$ l

Source: *Bacillus stearothermophilus H*

Storage Conditions: Store at -20°C

### Recognition/Cut Site

5'-G↓CGCGC-3'

3'-CGCGC↑G-5'

### Unit Definition

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

### 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 MgCl<sub>2</sub>

1 mM dithiothreitol (DTT)

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

\*supplied separately

### Assay Conditions

50 mM Tris-HCl (pH 7.5 at 37°C)

100 mM NaCl

10 mM MgCl<sub>2</sub>

1 mM dithiothreitol (DTT)

100  $\mu$ g/ml bovine serum albumin

1  $\mu$ g Lambda DNA

Incubation time is 1 hour at 50°C

Reaction volume of 50  $\mu$ l.

### Storage Buffer

10 mM Tris-HCl (pH 7.5)

50 mM KCl

0.1 mM EDTA

1 mM dithiothreitol (DTT)

0.02% Triton X-100™

500  $\mu$ g/ml bovine serum albumin

50% (v/v) glycerol

### Quality Control

**Non-Specific Endonuclease:** 10, 20, and 30 units of BssH II were incubated with Lambda DNA for 5 hours at 50°C and compared to a standard 4 unit, 1 hour assay.

**3'-Exonuclease:** 5, 10, and 20 units of BssH II were incubated with [<sup>3</sup>H] labeled 3'-ends of Lambda/Taq I DNA fragments for 1 hour at 50°C.

**5'-Exonuclease/5'-Phosphatase:** 5, 10, and 20 units of BssH II were incubated with [ $\gamma$  - <sup>32</sup>P] labeled 5' - ends of Lambda/Hae III DNA fragments for 1 hour at 50°C.

**Nicking:** 10, 20, and 30 units of BssH II were incubated with SV40 DNA for 5 hours at 50°C.