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## Certificate of Analysis

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### Sfi I

Catalog No: 2380

**Lot No:** See Product Label

**Package Size:** See Product Label

**Concentration:** See Product Label

**Source:** *Streptomyces fimbriatus*

**Storage Conditions:** Store at -20°C

#### Recognition/Cut Site

5'-GGCCNNNN↓NGGCC-3'  
3'-CCGGN↑NNNNCCGG-5'

#### Unit Definition

One unit is the amount of enzyme required to completely digest 1 µg of Adeno-2 DNA in 1 hour in a total reaction volume of 50 µl.

#### Reaction Temperature

50°C

#### Heat Inactivation

No

#### Assay Conditions

10 mM Tris-HCl (pH 7.5)

10 mM MgCl<sub>2</sub>

1 mM dithiothreitol

50 mM NaCl

1 µg of Adeno-2 DNA

100 µg/ml Bovine Serum Albumin

Incubation is at 50°C for 1 hour in a reaction volume of 50 µl

#### Storage Buffer

5 mM potassium phosphate (pH 7.4)

300 mM NaCl

0.1 mM EDTA

1 mM dithiothreitol

0.15% Triton X-100

100 µg/ml Bovine Serum Albumin

50% (v/v) Glycerol

#### Quality Control

**Non-specific Endonuclease:** Incubation of 10, 20, and 30 units of Sfi I with 1 µg of Adeno-2 DNA at 50°C for 5 hours (a 150-fold over-digestion) resulted in the same sharp characteristic banding pattern as the standard assay reaction, as determined by agarose gel electrophoresis.

**3'-Exonuclease:** Incubation of 5, 10, and 20 units of Sfi I and 5 pmole of 3'-ends of lambda/Taq I fragments (3'-labeled with Klenow exo- and [<sup>3</sup>H]dCTP), incubated for 1 hour at 50°C resulted in ≤0.3 slope of %-end label released per unit of enzyme. Reaction volume of 50 µl.

#### 5'-Exonuclease/5'-Phosphatase:

Incubation of 5, 10, and 20 units of Sfi I with 0.25 µg of 5'-ends of [<sup>5</sup>-<sup>32</sup>P]lambda/Hae III fragments for 1 hour at 50°C resulted in a less than ≤0.3 slope of %-end label released per unit of enzyme. Reaction volume of 50 µl.

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