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## Certificate of Analysis

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## Sal I

Catalog No: 2370

**Lot No:** See Product Label

**Package Size:** See Product Label

**Concentration:** See Product Label

**Source:** *Streptomyces albus* G

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

### Recognition/Cut Site

5'-G↓TCGAC-3'  
3'-CAGCT↑G-5'

### Unit Definition

One unit is the amount of enzyme required to completely digest 1 µg of Adenovirus-2 DNA in 1 hour at 37°C in a total reaction volume of 50 µl.

### Reaction Temperature

37°C

### Heat Inactivation

10 minutes at 65°C

### Assay Conditions

100 mM Tris-HCl (pH 7.6)  
10 mM MgCl<sub>2</sub>  
150 mM NaCl  
1 µg of Adenovirus-2 DNA  
Reaction volume 50 µl

### Storage Buffer

20 mM Potassium phosphate (pH 7.0)  
200 mM NaCl  
1.0 mM EDTA  
1.0 mM DTT  
5µg/ml Poly L-Lysine  
0.0065% Sodium azide  
500 µg/ml Bovine Serum Albumin  
50% (v/v) Glycerol

### Quality Control

**Endonuclease:** Incubation of 20, 35, and 50 units of Sal I with 1 µg of Adenovirus-2 DNA at 37°C for 5 hours (a 250-fold over-digestion) resulted in the same sharp characteristic banding pattern as 4 U/µg in the standard 1 hour assay reaction, as determined by agarose gel electrophoresis. Reaction volume of 50µl.

**Nicking:** Incubation of 20, 35, and 50 units of Sal I with 1 µg of φX-174 DNA at 37°C for 5 hours (a 250-fold over-digestion) resulted ≤40% conversion of RF I to RF II and no conversion to RF III, as determined by agarose gel electrophoresis. Reaction volume of 50µl.

**3'-Exonuclease:** Incubation of 5, 10 15, 20, and 30 units of Sal I with 5 pmole of lambda/Taq I fragments (3'-labeled with Klenow exo- and [<sup>3</sup>H]dCTP), incubated for 1 hour at 37°C resulted in a ≤0.2 slope of %-end label released per unit of enzyme. Reaction volume of 50 µl.

**5'-Exonuclease/5'-Phosphatase:** Incubation of 5, 10, 15, 20, and 30 units of Sal I with 0.25 µg of [5'-<sup>32</sup>P]lambda/Hae III fragments for 1 hour at 37°C resulted in a ≤0.2 slope of %-end label released per unit of enzyme. Reaction volume of 50 µl.

**Ligation/Recut:** Incubation of 4 units of Sal I with 1 µg of Ad-2 DNA at 37°C produces fragments that ligate with ≥85% efficiency. The recut efficiency of these ligated fragments is 100%.

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