

**Important!**

Includes new buffers!  
Review instructions  
before use.

## Sac II

Cat. no. 15240-901

Size: 2,000 Units

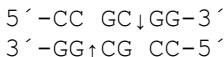
Store at  $-20^{\circ}\text{C}$

10X Buffer T: 1 mL

10X Loading Buffer: 1 mL

0.1% BSA: 1 mL

Cleavage Site:



### Restriction Enzyme Reaction Mix

*Sac* II 1  $\mu\text{L}$

10X Buffer T 2  $\mu\text{L}$

0.1% BSA 2  $\mu\text{L}$

Substrate DNA  $\leq 1$   $\mu\text{g}$

Sterile water to 20  $\mu\text{L}$

**Incubate at  $37^{\circ}\text{C}$ .**

To use the loading buffer, add 1/10 volume of 10X Loading Buffer to an aliquot of the reaction mix, load on to an agarose gel, and analyze by electrophoresis.

Visit [www.invitrogen.com/restrictionenzymes](http://www.invitrogen.com/restrictionenzymes) for details.

### Intended Use

For research use only. Not intended for any animal or human therapeutic or diagnostic use.

**Note:** SDS in the loading buffer may precipitate during storage at room temperature. Warm the buffer to dissolve any SDS precipitate before use.

## Source

*Streptomyces achromogenes*

## Unit Definition

One unit is the amount of enzyme required to completely digest 1  $\mu\text{g}$  of Ad2 DNA in 50  $\mu\text{L}$  of the reaction mixture in 1 hour at 37°C.

## Relative Activity in Universal Buffers

Buffer	L	M	H	K	T (+BSA)
Relative Activity (%)	40	20	<20	<20	100

## Inactivation by Heat

Enzyme is inactivated by heating at 65°C for 20 minutes.

## Effect of DNA Methylation

Enzyme activity is affected by CG methylase.

## Product Qualification

Certificate of Analysis is available from [www.invitrogen.com/support](http://www.invitrogen.com/support). Search for the certificate of analysis by product lot number, which is printed on the box.

## **Buffer Compositions**

### **10X Buffer T (BSA-free)**

330 mM Tris acetate, pH 7.9  
100 mM Magnesium acetate  
5 mM Dithiothreitol (DTT)  
660 mM Potassium acetate

### **Storage Buffer**

10 mM Tris-HCl, pH 7.5  
50 mM NaCl  
0.1 mM EDTA  
1 mM Dithiothreitol (DTT)  
0.01% BSA  
50% (v/v) glycerol

### **Loading Buffer**

1% SDS  
50% glycerol  
0.05% Bromophenol blue

## Related Products

Product	Quantity	Cat. no.
T4 DNA Ligase	250 units	15224-041
T4 Polynucleotide Kinase	1,000 U	18004-028
UltraPure™ Low Melting Point Agarose	100 g	16520-100
TrackIt™ 1 Kb Plus DNA Ladder	100 applications	10488-085
SYBR® Safe DNA Gel Stain (10,000X)	400 µL	S33102
E-Gel® EX Starter Kit, 1%	1 kit	G6511ST

## Technical Support

For technical support, email [tech\\_support@invitrogen.com](mailto:tech_support@invitrogen.com) or visit [www.invitrogen.com](http://www.invitrogen.com)

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