

# Spe I

Cat. no. 15443-013

Important!

Includes new buffers!
Review instructions
before use

Size: 200 Units

Store at -20°C 10X Buffer M: 1 mL

10X Loading Buffer: 1 mL

Cleavage Site: 5´-A↓CTAG T-3´

3´-T GATC↑A-5´

## **Restriction Enzyme Reaction Mix**

Spe I1  $\mu$ L10X Buffer M2  $\mu$ LSubstrate DNA $\leq$ 1  $\mu$ gSterile waterto 20  $\mu$ L

#### Incubate at 37°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 <u>www.invitrogen.com/restrictionenzymes</u> for details.

#### Intended Use

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

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

#### Source

Sphaerotilus natans

## **Unit Definition**

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

## **Relative Activity in Universal Buffers**

Buffer	L	M	Н	K	T (+BSA)
Relative Activity (%)	80*	100	80	100	80*

<sup>\*</sup>Weak star activity is detected.

## Inactivation by Heat

Enzyme is inactivated by heating at 80°C for 20 minutes.

## **Effect of DNA Methylation**

Enzyme activity is unaffected by DNA methylation.

## **Star Activity**

Unrelated site may be cut at low ionic strength.

# **Buffer Compositions**

#### 10X Buffer M

100 mM Tris-HCl, pH 7.5 100 mM MgCl<sub>2</sub>

10 mM Dithiothreitol (DTT)

500 mM NaCl

## Storage Buffer

10 mM Tris-HCl, pH 7.5

100 mM KCl

0.1 mM EDTA

1 mM Dithiothreitol (DTT)

0.15% Triton® X-100

0.01% BSA

50% (v/v) glycerol

## **Loading Buffer**

1% SDS

50% glycerol

0.05% Bromophenol blue

#### **Product Qualification**

Certificate of Analysis is available from <a href="https://www.invitrogen.com/support">www.invitrogen.com/support</a>. Search for the certificate of analysis by product lot number, which is printed on the box.

## **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 <sup>™</sup> 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 <u>tech\_support@invitrogen.com</u> or visit www.invitrogen.com

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