#### **Restriction Endonuclease**



E573

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Lot: 4



200 u 5000 u/ml Store at -20°C

**Recognition Sequence:** 

5'... TTS↓AA ... 3' 3'... AA^STT ...5'

Sourse: Agrococcus species 25

#### Supplied in:

10 mM Tris-HCI (pH 7.5); 100 mM KCI; 0,1 mM EDTA; 200 µg/ml BSA; 7 mM 2-mercaptoethanol; 50% glycerol. Reaction Conditions: 1×SEBuffer Y+BSA

#### Incubate at 37°C.

Warranty period for the enzyme storage at-20°C is two years from the date of the last assay indicated on the enzyme vial.

1×SEBuffer Y (pH 7.9 @ 25°C) 33 mM Tris-Ac 66 mM KAc 10 mM MgAc 1 mM DTT Unit Definition: One unit is defined as the amount of enzyme required to digest 1  $\mu$ g of  $\lambda$  DNA in 1 hour at 37°C in a total reaction volume of 50 µl. Concentrated enzymes are diluted to approximately 1000 units/ml with the buffer A [10 mM Tris-HCl (pH 7.6); 50 mM KCI; 0.1 mM EDTA; 1 mM DTT; 200 µg/ml BSA; 50% glycerol] before determining their activity. To obtain 100% activity, BSA should be added to the 1× reaction mix to a final concentration of 100  $\mu$ g/ml.

#### **Quality Control Assays**

Ligation: After 5-fold overdigestion with Ags I, >90% of  $\lambda$  DNA fragments can be ligated with T4 DNA Ligase and recut.

#### **16-Hour Incubation:**

A 50  $\mu$ l reaction containing 1 $\mu$ g of  $\lambda$  DNA and 10 units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

### **Oligonucleotide Assay:**

No detectable degradation of a singleand double-stranded oligonucleotide was observed after incubation with 5 units of enzyme for 3 hours.

# **Enzyme Properties**

Activity in SEBuffers: SEBuffer B 75-100% SEBuffer G 50-75% SEBuffer O 10-25% SEBuffer W 10-25% SEBuffer Y 100% SEBuffer ROSE 50%

When using a buffer other than the optimal (suppied) SEBuffer, it may be necessary to add more enzyme to achieve complete digestion.

#### Heat Inactivation:

**Yes** (65°C for 20 minutes)

## **Reagents Supplied with Enzyme:**

10×SEBuffer Y, BSA (10 mg/ml)

## CERTIFICATE OF ANALYSIS