



# Acl I

Recognition Sequence:

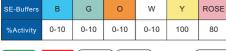
> E011m XS 100 units

3.000 u/ml

AAICGTT TTGC TAA

Lot: Exp:

Store at -20°C







For more details scen the code



## CERTIFICATE OF ANALYSIS

Source: Acinetobacter calcoaceticus.

## Supplied in:

10 mM Tris-HCl (pH 7.5), 100 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 200 µg/ml BSA, 0.05% Triton X-100, 50% glycerol.

#### Reaction Conditions:

1x SE-Buffer Y, BSA (100 µg/ml). Incubate at 37° C.

## 1X SE-Buffer Y (pH 7.9 @ 25° C):

33 mM Tris-Ac 66 mM KAc 10 mM MqAc 1 mM DTT

## **Heat Inactivation:**

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

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. To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 µg/ml.

#### **Quality Control Assays**

Ligation: After 3-fold overdigestion with Acl I, 90% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 6 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour. No using BSA for long incubation.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 3 units of restriction. endonuclease for 3 hours.

## **Enzyme Properties:**

When using a buffer other than the optimal (Supplied) SE-Buffer, it may be necessary to add more enzymes to achieve complete digestion.

Reagents Supplied with Enzyme: 10X SE Buffer Y, BSA (10 mg/ml).