



# Zrm I

Recognition Sequence:

E005m XS

500 units 20.000 u/ml AGT LACT TCATTGA

Lot: Exp:

Store at -20°C 33 mM Tris-Ac

SE-Buffers	В	G	0	W	Υ	ROSE
%Activity	50-75	25-50	0-10	0-10	100	50



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**BSA** 

## CERTIFICATE OF ANALYSIS

Source: Zoogloea ramigera SCA.

### Supplied in:

10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 200 µg/ml BSA, 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):

66 mM KAc 10 mM MgAc 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 µg 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 20-fold overdigestion with Zrm I, 70% 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 40 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

Do not use BSA for long incubation.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 20 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).