

Restriction  
Endonuclease



# Xma I

Recognition  
Sequence:

C↓CCGGG  
GGGCT↑C

S

**E233**

300 units  
3,000 u/ml

Lot:

Exp:

**Store at -20C**

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	75-100	50-75	0-10	0-10	100	50

37°C

65°C

Y

Ad-2

RR

For more details  
scan the code



Ph/F+7(383)333-6853  
info@sibenzyme.com  
www.sibenzyme.com

## CERTIFICATE OF ANALYSIS

Source: An *E. coli* strain that carries the cloned *Xma I* gene from *Xanthomonas malvacearum*.

Supplied in:

20 mM Tris-HCl (pH 7.6), 50 mM NaCl, 0.1 mM EDTA, 200 µg/ml BSA, 1 mM DTT, 50% glycerol.

Reaction Conditions:

1X SE-Buffer Y. Incubate at 37° C.

1X SE-Buffer Y (pH 7.9 @ 25° C):

33 mM Tris-Ac      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 Adv-2 DNA in 1 hour at 37° C in a total reaction volume of 50 µl.

Quality Control Assays

Ligation: After 3-fold overdigestion with Xma I, 95% of the DNA fragments can be ligated with T4 DNA Ligase and of these 90% can be recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 3 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 single-stranded and double-stranded oligonucleotide was observed after incubation with 10 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.