Restriction Endonuclease

SibEnzyme®

Zra I

Recognition Sequence:

GAC↓GTC
CTG↑CAG

S

E463

200 units

10,000 u/ml

Lot:

Exp:

Store at -20C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	100	50-75	25-50	25-50	75-100	100

37°C | 80°C | B | λ | RR

For more details scen the code

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CERTIFICATE OF ANALYSIS

Source: *An E.coli strain that carries the cloned Zra I gene from Zoogloea ramigera 11.*

Supplied in:
10 mM Tris-HCl (pH 7.5), 50 mM NaCl, 0,1 mM EDTA, 1 mM DTT, 200 µg/ml BSA, and 50% glycerol.

Reaction Conditions:
1X SE-Buffer B. Incubate at 37° C.

1X SE-Buffer B (pH 7.6 @ 25° C):
10 mM Tris-HCl
10 mM $MgCl_2$ 1 mM DTT

Heat Inactivation:
Enzyme is inactivated by incubation at 80°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.
The minimum number of units that resulted in com plete digestion of 1 ug of substrate DNA in 16 hours is 0.5. ZraI cleaves linear plasmid DNA at a rate 1.5 -2 times higher than supercoiled plasmid DNA.

Quality Control Assays
Ligation:After 10-fold overdigestion with Zra I, more than 90% of the DNA fragments can be ligated with T4 DNA Ligase and recut. In the presence of 10% PEG ligation is better.

16-Hour Incubation:A 50 µl reaction containing 1 µg of 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.
High enzyme concentration may result in star activity.

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 B.

Zra I is a neoschizomer of Aat II.