Restriction Endonuclease

SibEnzyme®

Acl I

Recognition Sequence:

AA↓CGTT
TTGC↑AA

XS

E011m

100 units

3,000 u/ml

Lot:

Exp:

Store at -20°C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	0-10	0-10	0-10	0-10	100	80

37°C | 65°C | Y | λ | BSA

For more details scen the code

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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 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 λ 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).