Restriction Endonuclease

SibEnzyme®

Afe I

Recognition Sequence:

AGC↓GCT
TCG↑CGA

XS

E213m
100 units
5,000 u/ml

Lot:
Exp:
Store at -20C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	10-25	25-50	75-100	75-100	100	100

37°C | 65°C | Y | λ/BamHI | RR | minimal

For more details scen 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 Afe I gene from *Alcaligenes faecalis* T2774.

Supplied in:
10 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 of the enzyme is the amount required to digest 1 µg of λ DNA (BamH I- digest) in 1 hour at 37° C in a total reaction volume of 50 µl.

Quality Control Assays
Ligation : After 10-fold overdigestion with Afe I, approximately 80% 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 5 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 5 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.