

Restriction  
Endonuclease



# Afe I

Recognition  
Sequence:

AGC↓GCT  
TCG↑CGA

S

**E213**

200 units  
10,000 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

For more details  
scan the code



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## 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.