

Restriction  
Endonuclease



# Aat II

Recognition  
Sequence:

GACGT↓C  
C↑TGCAG

XS

**E287m**  
250 units  
10,000 u/ml

Lot:  
Exp:  
**Store at -20C**

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

37°C 65°C Y λ RR minimal

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

Source: An *E.coli* strain that carries the cloned Aat II gene from *Acetobacter acetii*.

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 is defined as the amount required to digest 1 µg of λ DNA in 1 hour at 37° C in a total reaction volume of 50 µl.

Quality Control Assays  
Ligation : After 10-fold overdigestion with Aat II, approximately 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 10 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.  
Conditions of 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 Y.