Restriction Endonuclease

SibEnzyme®

# Aat II

Recognition Sequence:

GACGT↓C
C↑TGCAG

L

**E288**
2,500 units
20,000 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

For more details scen the code

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# CERTIFICATE OF ANALYSIS

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

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 1mM 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.