#### Restriction Endonuclease

# FauND I

Recognition		CA↓TATG
Sequence:		CTAT↑AC
xs	E009m 500 units 10,000 u/ml	Lot: Exp: Store at -20

#### В W Υ ROSE SE-Buffers G 50-75 75-100 10-25 50-75 100 100 %Activity



For more details scen the code

at -20C

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SibEnzyme®

1X SE-Buffer Y (pH 7.9 @ 25° C):

Supplied in:

**Reaction Conditions:** 

33 mM Tris-Ac 66 mM KAc 10 mM MqAC 1 mM DTT

CERTIFICATE OF ANALYSIS

200 µg/ml BSA, 1 mM DTT, 50% glycerol.

Source: An E.coli strain that carries the cloned

FauND1 gene from *Flavobacterium aquatili ND*.

10 mM Tris-HCl (pH 7.6), 50 mM KCl, 0.1 mM EDTA,

1x SE-Buffer Y, BSA(100 µg/µl) Incubate at 37° C.

### 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  $\mu$ g of  $\lambda$  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 final concentration of 100  $\mu$ g/ $\mu$ l.

## Quality Control Assays

Ligation : After 10-fold overdigestion with FauND I, approximately 80% of the DNA fragments can be ligated with T4 DNA Ligase and recut. In the presence of 10% PEG ligation is better.

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.

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.

#### Note:

Sensitive to impurities in some DNA preparations. For example, DNA purified by standard miniprep procedures is cleaved at lower rates.

#### **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. 100X BSA (10 ma/ul).