Restriction Endonuclease

Fat I

Recognition		↓CATG
Sequence:		GTAC↑
xs	E155m 50 units 2,000 u/ml	Lot: Exp: Store at -20C

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

pUC19



CERTIFICATE OF ANALYSIS

Source: An E.coli strain that carries the cloned Fat I gene from Flavobacterium aquatile NL3.

Supplied in:

SibEnzyme®

minimal

10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0,1 mM EDTA, 1 mM DTT, 200 µg/ml BSA, and 50% glycerol.

Reaction Conditions: 1x SE-Buffer G. Incubate at 55° C.

1X SE-Buffer G (pH 7.6 @ 25° C): 10 mM Tris-HCl 50 mM NaCl 10 mM MgCl, 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 of enzyme required to digest 1 µg of pUC19 in 1 hour at 55° C in a total reaction volume of 50 µl.

Quality Control Assays

Ligation: After 2-fold overdigestion with Fat I, approximately 90% of the DNA fragments can be ligated with high-activity T4 DNA Ligase and recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 2 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 2 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 G.

Note: Fat Lis a neoschizomer of NIa III.

Blocked by "CATG methylation.