



Xba I

Recognition Sequence:

xs **E945m**

2,000 units 20,000 u/ml

T↓CTAGA AGATC†T

Lot: Exp:

Store at -20C

RR BSA Dam

SE-Buffers	В	G	0	W	Υ	ROSE
%Activity	0-10	100	50-75	25-50	100	100

For more details scen the code



CERTIFICATE OF ANALYSIS

<u>Source</u>: An E.coli strain that carries the cloned Xba I gene from Xanthomonas badrii.

Supplied in:

10 mM Tris-HCl (pH 7.4), 50 mM NaCl, 0.1 mM EDTA, 1 mM DTT, 50% glycerol.

Reaction Conditions:

1X SE-Y, BSA (100 µg/ml). 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 of enzyme required to digest 1 μ g of Lambda DNA (Dam-)/HindIII in 1 hour at 37° C in a total reaction volume of 50 μ l. To obtain 100% activity, BSA should be added to the 1 x reaction mix to a final concentration of 100 μ g/ml.

Quality Control Assays

<u>Ligation</u>:After 20-fold overdigestion with Xba I, ~90% of the DNA fragments can be ligated and recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg of DNA and 40 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

Do not use BSA for long incubation.

Oligonucleotide Assay:No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 20 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, BSA (10mg/ml).

Blocked by overlapping Dam-methylation (G $^{\rm m}{\rm ATC}$): TCTA $\underline{\rm GATC}$