

Restriction  
Endonuclease



# Xba I

Recognition  
Sequence:

↓CTAGA  
AGATC↑

S

**E141**

2,000 units  
20,000 u/ml

Lot:

Exp:

**Store at -20C**

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

37°C 65°C O λ/HindIII RR BSA Dam

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

Source: An *E. coli* strain that carries the cloned *Xba I* gene from *Xanthomonas badrii*.

Supplied in:  
10 mM Tris-HCl (pH 7.5), 50 mM NaCl, 0.1 mM EDTA,  
1 mM DTT, 50% glycerol.

Reaction Conditions:  
1X SE-0, BSA (100 µg/ml). Incubate at 37° C.

1X SE-Buffer 0 (pH 7.6 @ 25° C):  
50 mM Tris-HCl 100 mM NaCl  
10 mM MgCl<sub>2</sub> 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 Lambda DNA (Dam-)/HindIII in 1 hour at 37° C in a total reaction volume of 50 µl. To obtain 100% activity, BSA should be added to the 1 x reaction mix to a final concentration of 100 µg/ml.

### Quality Control Assays

Ligation: 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 0, BSA (10mg/ml).

Blocked by overlapping Dam-methylation (G<sup>m</sup>ATC):  
TCTAGATC