1 Broadway
Cambridge, MA 02142
United States

Tel: (617) 665-7333
support@kactusbio.us
kactusbio.com

XbaI

Catalog #XBA-EE101

Product Component	Sizes
XbaI (20U/µL)	400U, 2000U, 20kU
10X Cut Reaction Buffer	150µL, 750µL, 7.5mL

Storage/Transportation Condition Store at -20°C ± 5°C for 24 months. Avoid repeated freeze/thaw cycles. Transport on dry ice.
Form Liquid
Source *E. Coli*
Storage Buffer 10 mM Tris-HCl, 50 mM NaCl, 1 mM DTT, 0.1 mM EDTA, 200 µg/ml Recombinant Albumin, 50% Glycerol, pH 7.4
10X Cut Reaction Buffer 200 mM Tris-acetate, 500 mM Potassium Acetate, 100 mM Magnesium Acetate, 1 mg/ml Recombinant Albumin, pH 7.9
Concentration 20U/µL
Unit Definition One unit is defined as the amount of enzyme required to digest 1µg of λDNA (dam-/HindIII digest) in one hour at 37°C in a total reaction volume of 50µL.

Restriction Site
5' …T↓CTAGA… 3'
3' …AGATC↑T… 5'

Product Description
XbaI is a restriction endonuclease that can precisely cut DNA within 30 minutes at 37°C. The cutting site of XbaI is T/CTAGA. It is recommended to use the buffer provided as it has been optimized for this specific endonuclease. Our storage buffer formulation uses recombinant albumin to ensure a BSA-free reaction.

Quality Statement
This product is GMP-Ready, indicating that it is currently manufactured at industrial-grade and can be moved to GMP-Grade manufacturing standards as necessary.

Applications
- Molecular cloning
- Restriction enzyme digestion
- Genotyping
- Southern blot
- SNP

Recommended Protocol for Digestion
1. Prepare the following reaction mixture on ice.

Reagent	Quantity
DNA	1 µg
10X Cut Reaction Buffer	5 µL
XbaI (20U/µL)	1 µL
Nuclease-free H$_2$O	Up to 50 µL

2. Mix gently and spin down for a few seconds.
3. Incubate at 37°C for 30 minutes.
4. (Optional) Heat inactivate XbaI by incubating at 65°C for 20 minutes.

Notes
1. XbaI is not sensitive to *dcm* or CpG methylation.
2. XbaI cleavage is blocked by dam methylation.
3. Number of Recognition Sites in DNA:

λDNA	ΦX174	pBR322	pUC57	pUC18/19	M13mp18/19
1	0	0	1	1	1

4. For research use only.