

## Product Description

Xba I is a Type IIP restriction endonuclease expressed in *Escherichia coli* carrying the Xba I gene cloned from *Xanthomonas badrii* (ATCC 11672). Its recognition and cleavage sequences are shown below:

5'...T ↓ CTAGA...3'

3'...AGATC ↑ T...5'

## Components

Components	BR1G123-01 1,500 U	BR1G123-02 3,000 U	BR1G123-03 15,000 U
Xba I (20 U/μL)	1×0.075 mL	1×0.15 mL	1×0.75 mL
10×Xba I Reaction Buffer	1×1 mL	1×1 mL	4×1 mL

## Unit Definition

One unit of activity is defined as the amount of enzyme required to completely cleave 1 μg of λDNA (HindIII-digested) fragments within 1 hour at 37°C.

## Storage

Store at -20±5°C.

## Notes

1. For research use only. Not for use in clinical diagnosis.
2. Mix thoroughly before use. Avoid repeated freeze-thaw cycles.
3. The volume of restriction endonuclease added should not exceed one-tenth of the total reaction volume.
4. Suitable for digestion of genomic DNA, plasmid DNA, and PCR products.
5. Digestion for longer than 3 h is not recommended, as prolonged incubation may lead to star activity.
6. The reaction activity in Biori General Cut-Buffer is 50% compared to that in the optimal recommended buffer.

## Prepare Reaction Mix

Prepare the reaction mix on ice as follows:

Components	Volume per Reaction	Concentration in Master Mix
10×Xba I Reaction Buffer	5 μL	1×
Xba I (20 U/μL)	1 μL	0.4 U/μL
DNA Substrate	1 μg	—
ddH <sub>2</sub> O	To 50 μL	—

## Reaction Programe

Incubate at 37°C for 1 h. Heat inactivation: incubate at 65°C for 20 min.