

Xbal

DD4304PCEN

Version 22.1



Product Description

The product Xbal is a recombinant protein encoded by the gene of *Xanthomonas badrii* and expressed in *E. coli*. It is an IIP-type restriction endonuclease, and its recognition sequence and cleavage sites are shown below.



Components

Component	DD4304PCEN-01 (750 KU)	DD4304PCEN-02 (15 KU)	DD4304PCEN-03 (75 KU)	DD4304PCEN-04 (300 KU)
Xbal (15 U/μl)	50 μl	1 ml	5 ml	20 ml

Storage

Store at -30 ~ -15°C and transport at ≤ 0°C.

Product Information

Product Name	Xbal
Source	Recombinant <i>E. coli</i>
Activity	15 U/μl
Unit Definition	One unit is defined as the amount of enzyme required to completely cleave 1 μg of dam- λDNA within 1 hour at 37°C.
Digestion Buffer III (1×)	33 mM Tris-acetate (25°C, pH 7.9), 10 mM magnesium acetate, 66 mM potassium acetate, 100 μg/ml OsrHSA
Storage Buffer	10 mM Tris-HCl (25°C, pH 7.4), 100 mM KCl, 1 mM DTT, 1 mM EDTA, 200 μg/ml OsrHSA, 50% glycerol
Storage Conditions	-30 ~ -15°C

Application

1. Enzyme-digest plasmids to prepare linearized DNA fragments.
2. Enzyme-digest DNA to obtain specific sticky ends.

Recommended Reaction System

Component	Volume	Final Concentration
10× Digestion Buffer III	2 μl	1×
Xbal (15 U/μl)	1 μl	0.75 U/μl
Plasmid DNA	1 - 2 μg	50 - 100 ng/μl
RNase-free ddH ₂ O	Up to 20 μl	-

Reaction conditions: reaction at 37°C for 1 h

Notes

1. For research use only. Not for use in diagnostic procedures.
2. The addition volume of the restriction endonuclease should not exceed 1/10 of the reaction volume.
3. Star activity may occur at glycerol concentrations > 5%.
4. When the sequence near the recognition site is 5'...TCTAGATC...3', the enzyme digestion activity of Xbal will be disrupted by dam methylation, resulting in incomplete cleavage.

