



## Restriction Enzyme Bal I



Cat.#	Size	Conc.
FG-Bal	50 units	5 units/μl

Store at -20°C

**Supplied with:** 10X FastGene® Buffer Bal I (FG-REBBal)  
6X DNA Loading Buffer  
Sterile water

### Recognition site

*For Research Use Only. Not for use in diagnostic procedures.*

ISO9001

**Source:** *Brevibacterium albidum*

### Reaction conditions

1X FastGene® Buffer Bal I 37°C

### 1X FastGene® Buffer Bal I

50 mM Tris-HCl (pH 8.2 at 25°C)  
5 mM MgCl<sub>2</sub>

### Unit definition

One unit is defined as the amount of enzyme required for complete digestion of 1 μg bacteriophage λ at 37°C for 1 hr in 50 μl reaction mixtures.

### Quality control

- Unit definition assay
- Overdigestion assay
- Endonuclease assay
- Extreme pure assay

### Dilution buffer:

FastGene® Diluent B

### Heat Inactivation

Bal I can be inactivated at 65°C for 20 min.

### Methylation sensitivity

*dam* methylation: Not sensitive  
*dcm* methylation: Conditionally sensitive  
CpG methylation: Not sensitive

### Relative activity in FastGene® Buffers

FastGene® Buffer I:	0%
FastGene® Buffer II:	75%
FastGene® Buffer III:	25%
FastGene® Buffer IV:	75%

### Note

Activity is inhibited by *dcm* methylation partially overlapping its recognition sequence.

### Standard reaction condition

- Normal protocol

Component	Final Conc.	Volume
Substrate DNA	1 μg	X μl
10X FastGene® Buffer Bal I	1 X	5 μl
Bal I	5 unit	1 μl
Sterile water		up to 50 μl

→ Incubate at 37°C for 1 hr

※ We recommend 5-10 units of enzyme per μg DNA and 10-20 units for genomic DNA in a 1 h digest.



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