FastGene®

Restriction Enzyme Bal I

Bal I 37℃ 65℃ Dam

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

Store at -20℃

Supplied with: 10X FastGene® Buffer Bal I (FG-REBBalI)
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℃

1X FastGene® Buffer Bal I
50 mM Tris-HCl (pH 8.2 at 25℃)
5 mM $MgCl_2$

Unit definition
One unit is defined as the amount of enzyme required for complete digestion of 1 µg bacteriophage λ at 37℃ 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℃ 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℃ 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.