

G Fast Gene **Restriction Enzyme**

Bal I

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

Store at -20°C

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

Recognition site



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

ISO9001

(Bal) (37°) 65° (Dom

Source: Brevibacterium albidum

Reaction conditions 1X FastGene[®] Buffer Bal I 37℃

1X FastGene® Buffer Bal I 50 mM Tris-HCI (pH 8.2 at 25°C) 5 mM MgCl₂

Unit definition

One unit is defined as the amount of enzyme required for complete digestion of 1 μ g 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.

Fenetics NIPPON Genetics EUROPE GmbH www.nippongenetics.eu www.n-genetics.com

G Fast Gene®

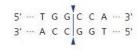
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1X FastGene® Buffer Bal I

5 mM MgCl₂

complete digestion of 1 μg bacteriophage λ at 37°C for 1 hr in 50 µl reaction mixtures.

- Endonuclease assay



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- Quality control
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- Overdigestion assay
- Extreme pure assay