



# **Restriction Enzyme** Acc III



Cat.# Size FG-AccIII 1.000 units

Conc. 10 units/µl

Store at -20℃

Supplied with: 10X FastGene® Buffer Acc III (FG-REBAccIII) 6X DNA Loading Buffer Sterile water

Recognition site

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



Source: Acinetobacter calcoaceticus

Reaction conditions

1X FastGene® Buffer Acc III 65°C

1X FastGene® Buffer Acc III

10 mM Tris-HCI (pH 8.5 at 25°C) 100 mM NaCl 10 mM MgCl<sub>2</sub> 100 µg/ml BSA

## Unit definition

One unit is defined as the amount of enzyme required for complete digestion of 1 μg bacteriophage λ at 65°C for 1 hr in 50 µl reaction mixtures.

## Quality control

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

Source: Acinetobacter calcoaceticus

One unit is defined as the amount of enzyme required for

mM dithiothreitol, 500 µg/ml BSA, 50% glycerol.

complete digestion of 1 μg bacteriophage λ at 65°C for 1 hr in

10 mM Tris-HCl (pH 7.3 at 25°C), 300 mM NaCl, 0.1 mM EDTA, 1

Reaction conditions

100 mM NaCl

10 mM MaCl<sub>2</sub>

100 µg/ml BSA

Unit definition

50 µl reaction mixtures.

1X FastGene® Buffer Acc III 65°C

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10 mM Tris-HCl (pH 8.5 at 25°C)

## Dilution buffer:

FastGene® Diluent B

#### **Heat Inactivation**

Methylation sensitivity

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

#### Relative activity in FastGene® Buffers

FastGene® Buffer I: 0% 25% FastGene® Buffer II: FastGene® Buffer III: 100% FastGene® Buffer IV: 0%

FastGene® FastCut Buffer: Not recommended

Acc III cleavage is blocked by dam methylation partially overlapping its recognition site.

#### Standard reaction condition

- Normal protocol

Component	Final Conc.	Volume
Substrate DNA	1 μg	Χ μΙ
10X FastGene® Buffer Acc III	1 X	5 μΙ
Acc III	10 unit	1 μΙ
Sterile water		up to 50 μl
→ Incubate at 65°C for 1 hr		

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

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

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**ISO**9001

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6X DNA Loading Buffer Sterile water

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## Relative activity in FastGene® Buffers

FastGene® Buffer I: 25% FastGene® Buffer II: 100% FastGene® Buffer III: 0% FastGene® Buffer IV:

Not recommended FastGene® FastCut Buffer:

## Note

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