



Restriction Enzyme Eco47 I

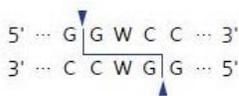


Cat.# FG-Eco47I **Size** 800 units **Conc.** 10 units/μl

Store at -20°C

Supplied with: 10X FastGene® Buffer III (FG-REB3)
10X FastGene® FastCut Buffer (FG-REBHF)
6X DNA Loading Buffer
Sterile water

Recognition site



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



Dilution buffer:

FastGene® Diluent A

Heat Inactivation

Eco47 I can be inactivated at 65°C for 20 min.

Methylation sensitivity

dam methylation: Not sensitive

dcm methylation: sensitive

CpG methylation: sensitive

Relative activity in FastGene® Buffers

FastGene® Buffer I: 100%

FastGene® Buffer II: 100%

FastGene® Buffer III: 100%

FastGene® Buffer IV: 100%

FastGene® FastCut Buffer: 100%

Source: *E. coli* RFL47

Reaction conditions

1X FastGene® Buffer III 37°C

1X FastGene® FastCut Buffer, 37°C

FastGene® FastCut Buffer

FastGene® restriction enzyme can cut substrate DNA in 5-15 with FastGene® FastCut Buffer.

1X FastGene® Buffer III

50 mM Tris-HCl (pH 7.9 at 25°C)

100 mM NaCl

10 mM MgCl₂

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 37°C for 1 hr in 50 μl reaction mixtures.

Quality control

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

Standard reaction condition

- Normal protocol

Component	Final Conc.	Volume
Substrate DNA	1 μg	X μl
10X FastGene® Buffer III	1 X	5 μl
Eco47 I	10 unit	1 μl
Sterile water		up to 50 μl

→ Incubate at 37°C for 1 hr

- Fast protocol

Component	Final Conc.	Volume
Substrate DNA	1 μg	X μl
10X FastGene® FastCut Buffer	1 X	5 μl
Eco47 I	10 unit	1 μl
Sterile water		up to 50 μl

→ Incubate at 37°C for 15 min

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