



# Restriction Enzyme Hpy99 I

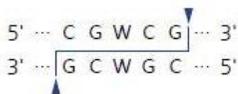


**Cat.#** FG-Hpy99I      **Size** 100 units      **Conc.** 2 units/μl

Store at -20°C

**Supplied with:** 10X FastGene® Buffer IV (FG-REB4)  
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

Hpy99 I can be inactivated at 65°C for 20 min.

## Methylation sensitivity

*dam* methylation: Not sensitive

*dcm* methylation: Not sensitive

CpG methylation: sensitive

## Prolonged incubation

A minimum amount of enzyme required to digest 1 μg substrate DNA for 16 hr; 1 U.

## Relative activity in FastGene® Buffers

FastGene® Buffer I: 100%  
FastGene® Buffer II: 25%  
FastGene® Buffer III: 10%  
FastGene® Buffer IV: 100%  
FastGene® FastCut Buffer: 100%

## Note

Cleavage of mammalian genomic DNA is blocked by CpG methylation.

**Source:** *Helicobacter pylori* J99

## Reaction conditions

1X FastGene® Buffer IV 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 IV

20 mM Tris-acetate (pH 7.9 at 25°C)

50 mM potassium acetate

10 mM magnesium acetate

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 IV	1 X	5 μl
Hpy99 I	2 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
Hpy99 I	2 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.