



# Restriction Enzyme Hind II



**Cat.#** FG-HindII      **Size** 2,500 units      **Conc.** 4 units/μl

Store at -20°C

**Supplied with:** 10X FastGene® Buffer II (FG-REB2)  
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

Hind II 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; 0.13 U.

### Relative activity in FastGene® Buffers

FastGene® Buffer I: 100%  
FastGene® Buffer II: 100%  
FastGene® Buffer III: 50%  
FastGene® Buffer IV: 100%  
FastGene® FastCut Buffer: 100%

### Note

It is an isoschizomer of Hinc II.

**Source:** *Haemophilus influenzae* Rd com-10

### Reaction conditions

1X FastGene® Buffer II 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 II

10 mM Tris-HCl (pH 7.9 at 25°C)

50 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 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 II	1 X	5 μl
Hind II	4 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
Hind II	4 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.