FastGene

# Restriction Enzyme Mun I

II 37° 65°

| Cat.# | Size | Conc. |
|---|---|---|
| FG-MunI | 300 units | 10 units/μl |

**Store at -20℃**

**Supplied with:** 10X FastGene® Buffer II (FG-REB2)
10X FastGene® FastCut Buffer (FG-REBHF)
6X DNA Loading Buffer
Sterile water

**Recognition site**

5' ··· C A A T T G ··· 3'
3' ··· G T T A A C ··· 5'

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

ISO9001

## Source
*Mycoplasma unidentified*

## Reaction conditions
- 1X FastGene® Buffer Ⅱ, 37℃
- 1X FastGene® FastCut Buffer, 37℃

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

## 1X FastGene® Buffer II
10 mM Tris-HCl (pH 7.9 at 25℃)
50 mM NaCl
10 mM $MgCl_2$
100 μg/ml BSA

## Unit definition
One unit is defined as the amount of enzyme required to digest 1 μg of Lambda DNA in 1 hour at 37℃ in a total reaction volume of 50 μl.

## Quality control
- Unit definition assay
- Overdigestion assay
- Endonuclease assay
- Extreme pure assay

## Dilution buffer
FastGene® Diluent A

## Heat Inactivation
Mun I can be inactivated at 65℃ for 20 min.

## Methylation sensitivity
*dam* methylation: Not sensitive
*dcm* methylation: Not sensitive
CpG methylation: Not sensitive

## Relative activity in FastGene® Buffers

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

## Note
It is an isoschizomer of Mfe I.

## Standard reaction condition
- Normal protocol

| Component | Final Conc. | Volume |
|---|---|---|
| Substrate DNA | 1 μg | X μl |
| 10X FastGene® Buffer II | 1 X | 5 μl |
| Mun I | 10 unit | 1 μl |
| Sterile water | | up to 50 μl |

→ Incubate at 37℃ for 1 hr

- Fast protocol

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

→ Incubate at 37℃ 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.