



# Restriction Enzyme Cfr10 I

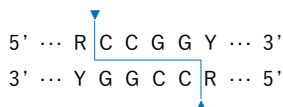


<b>Cat.#</b> FG-Cfr10I	<b>Size</b> 200 units	<b>Conc.</b> 10 units/ $\mu$ l
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Store at -20°C

**Supplied with:** 10X FastGene® Buffer Cfr10 I (FG-REBCfr10I)  
10X FastGene® FastCut Buffer (FG-REBHF)  
6X DNA Loading Buffer  
Sterile water

## Recognition site



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

ISO9001

## Source

*Citrobacter freundii* RFL 10

## Reaction conditions

1X FastGene® Buffer Cfr10 I, 37°C  
1X FastGene® FastCut Buffer, 37°C

## FastGene® FastCut Buffer

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

## 1X FastGene® Buffer Cfr10 I

10 mM Tris-HCl (pH 8.5 at 25°C)  
3 mM MgSO<sub>4</sub>  
100 mM KCl  
0.02% Triton X-100

## Unit definition

One unit is defined as the amount of enzyme required to digest 1  $\mu$ g of Lambda DNA in 1 hour at 37°C in a total reaction volume of 50  $\mu$ l.

## Quality control

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

## Standard reaction condition

- Normal protocol

Component	Final Conc.	Volume
Substrate DNA	1 $\mu$ g	X $\mu$ l
10X FastGene® Buffer Cfr10 I	1 X	5 $\mu$ l
Cfr10 I	10 unit	1 $\mu$ l
Sterile water		up to 50 $\mu$ l

→ Incubate at 37°C for 1 hr

- Fast protocol

Component	Final Conc.	Volume
Substrate DNA	1 $\mu$ g	X $\mu$ l
10X FastGene® FastCut Buffer	1 X	5 $\mu$ l
Cfr10 I	10 unit	1 $\mu$ l
Sterile water		up to 50 $\mu$ l

→ Incubate at 37°C for 15 min

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

## Dilution buffer

FastGene® Diluent A

## Heat Inactivation

No

## Methylation sensitivity

*dam* methylation: Not sensitive  
*dcm* methylation: Not sensitive  
CpG methylation: Sensitive

## Relative activity in FastGene® Buffers

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

## Note

Reaction condition with excess enzyme (10 fold) or low salt concentration may result in star activity. For cleavage with Cfr10 I at least two copies of its recognition sequence are required. It is an isoschizomer of BsrF I.