

Restriction Enzyme Cfr42 I



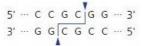
Cat.# FG-Cfr42I Size 1,200 units Conc. 10 units/µl

Store at -20℃

Supplied with: 10X FastGene® Buffer I (FG-REB1)

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

Dilution buffer:

FastGene® Diluent A

Heat Inactivation

Cfr42 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 μ g substrate DNA for 16 hr: 0.5 U.

Relative activity in FastGene® Buffers

 FastGene® Buffer I:
 100%

 FastGene® Buffer II:
 50%

 FastGene® Buffer III:
 25%

 FastGene® Buffer IV:
 75%

 FastGene® FastCut Buffer:
 100%

Note

Cleavage of mammalian genomic DNA is blocked by CpG methylation.

Source: Citrobacter freundii RFL42

Reaction conditions

1X FastGene® Buffer I 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 I

10 mM Bis Tris Propane-HCl (pH 7.0 at 25°C) 10 mM MgCl₂ 100 ua/ml BSA

Unit definition

One unit is defined as the amount of enzyme required for complete digestion of 1 μ g bacteriophage λ (Hind III digestion) at 37°C for 1 hr in 50 μ l 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	Xμl
10X FastGene® Buffer I	1 X	5 μΙ
Cfr42 I	10 unit	1 µl
Sterile water		up to 50 μl
1 1 4 4 2706 6 4 1		

→ Incubate at 37°C for 1 hr

- Fast protocol

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Component	Final Conc.	Volume
Substrate DNA	1 μg	Χ μΙ
10X FastGene® FastCut Buffer	1 X	5 μΙ
Cfr42 I	10 unit	1 μΙ
Sterile water		up to 50 μl

→ Incubate at 37°C for 15 min

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