FastGene®

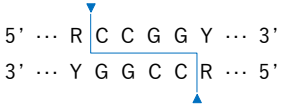
Restriction Enzyme Cfr10 I

Cat.#	Size	Conc.
FG-Cfr10I	200 units	10 units/µl

Store at -20℃

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℃
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 Cfr10 I
10 mM Tris-HCl (pH 8.5 at 25℃)
3 mM $MgSO_4$
100 mM KCl
0.02% Triton X-100

Unit definition
One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37°C 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
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 Cfr10I at least two copies of its recognition sequence are required. It is an isoschizomer of BsrF I.

Standard reaction condition
- Normal protocol

Component	Final Conc.	Volume
Substrate DNA	1 µg	X µl
10X FastGene® Buffer Cfr10 I	1 X	5 µl
Cfr10 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
Cfr10 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.