FastGene®

Restriction Enzyme Alw26 I

(IV) (37) (65) (CpG)

Cat.#	Size	Conc.
FG-Alw26I	1,000 units	10 units/µl

Store at -20℃

Supplied with: 10X FastGene® Buffer IV   (FG-REB4)
               10X FastGene® FastCut Buffer (FG-REBHF)
               6X DNA Loading Buffer
               Sterile water

Recognition site

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5' ··· G T C T C (N) ··· 3'
3' ··· C A G A G (N) ··· 5'
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For Research Use Only. Not for use in diagnostic procedures.

ISO9001

Source: *Acinetobacter lwoffi* RFL26

Reaction conditions
1X FastGene® Buffer IV 37℃
1X FastGene® FastCut Buffer, 37℃

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

1X FastGene® Buffer IV
20 mM Tris-acetate (pH 7.9 at 25℃)
50 mM potassium acetate
10 mM magnesium acetate
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℃ for 1 hr in 50 µl reaction mixtures.

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

Dilution buffer:
FastGene® Diluent A

Heat Inactivation
Alw26 I can be inactivated at 65℃ for 20 min.

Methylation sensitivity
dam methylation: Not sensitive
dcm methylation: Not sensitive
CpG methylation: Conditionally sensitive

Relative activity in FastGene® Buffers
FastGene® Buffer I:	75%
FastGene® Buffer II:	100%
FastGene® Buffer III:	50%
FastGene® Buffer IV:	100%
FastGene® FastCut Buffer:	100%

Note
It is an isoschizomer of BsmA I. Cleavage of mammalian DNA is blocked by overlapping CpG methylation.

Standard reaction condition
- Normal protocol

Component	Final Conc.	Volume
Substrate DNA	1 µg	X µl
10X FastGene® Buffer IV	1 X	5 µl
Alw26 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
Alw26 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.