FastGene®

Restriction Enzyme PspG I

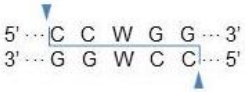
IV 37 NO Dcm

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

Store at -20℃

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

Recognition site



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

ISO9001

Source: *Pyrococcus* species strain GI-H

Reaction conditions
1X FastGene® Buffer IV 37℃ or 75℃

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 to digest 1 µg of T7 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
No.

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

Prolonged incubation
A minimum amount of enzyme required to digest 1 µg substrate DNA for 16 hr; 0.13 U.

Relative activity in FastGene® Buffers

FastGene® Buffer I:	25%
FastGene® Buffer II:	100%
FastGene® Buffer III:	75%
FastGene® Buffer IV:	100%
FastGene® FastCut Buffer:	Not recommended

Standard reaction condition
- Normal protocol

Component	Final Conc.	Volume
Substrate DNA	1 µg	X µl
10X FastGene® Buffer IV	1 X	5 µl
PspG I	10 unit	1 µl
Sterile water		up to 50 µl

→ Incubate at 37℃ or 75℃ for 1 hr

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