



Restriction Enzyme

PspG I

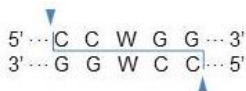


Cat.#	Size	Conc.
FG-PspGI	1,000 units	10 units/μl

Store at -20°C

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°C or 75°C

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20 mM Tris-acetate (pH 7.9 at 25°C)
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°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: 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°C or 75°C 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.