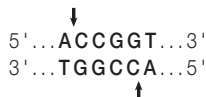


AsiG I
(Age I)



Product No : FDRE1126
Quantity : 25 preps

Lot :
Expiry Date :
Concentration : 5u/μl
Supplied with : 1ml of 10X Buffer FD



Store at -20°C



info@vivantechnologies.com



Storage Buffer:

10mM Tris-HCl (pH 7.5), 250mM KCl, 0.1mM EDTA,
7mM 2-mercaptoethanol, 100μg/ml BSA and 50% glycerol.

Unit Definition:

5u (1μl) is defined as the amount of enzyme that is required to digest 1μg of DNA within 15 minutes at 37°C in 20μl or 50μl of assay buffer.

Thermal inactivation:

65°C for 20 minutes.

Quality Control Assays:

Ligation/ Recutting Assay:

After 5-fold overdigestion with **AsiG I**, 90% of the DNA fragments can be ligated and recut.

Overdigestion assay:

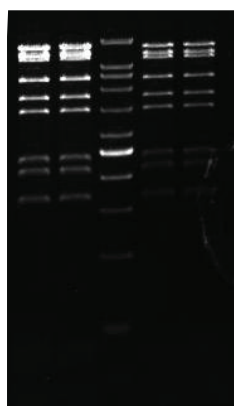
An unaltered banding pattern was observed after 1μg of DNA was digested with 10u of **AsiG I** for 16 hours at 37°C.

Example of Digestion Reaction:

| Reagents | 20μl Assay Buffer | 50μl Assay Buffer |
|-------------------------|-------------------------|------------------------|
| Enzyme | 1μl | 2μl |
| Lambda DNA 0.5μg/μl | 2μl | 2μl |
| 10X Buffer FD | 2μl | 5μl |
| Sterile Distilled Water | Up to 20μl (high yield) | Up to 50μl (low yield) |

| Assay Volume | Incubation Time (mins) | | |
|--------------|------------------------|----|----|
| | 5 | 10 | 15 |
| 20μl | X | V | V |
| 50μl | X | V | V |

Digestion of λ DNA in 20μl assay after 10 mins



0.7% Agarose

Digestion of λ DNA in 50μl assay after 10 mins

Figure: 1μg DNA fragments were completely digested within 15 mins of incubation time at 37°C using 1μl & 2μl of **AsiG I** in 20μl & 50μl assay buffer respectively.

Note:

- *High enzyme concentration may result in Star Activity.
- *Total reaction volume dependent on experiment.
- *For plasmid DNA, 2-3X more enzymes are required.
- *Concentration of enzyme may be different according to different batch.

Product Use Limitation

This product is for research purposes and *in vitro* use only.

v i v a n t i s

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