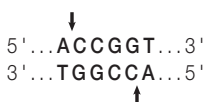


### AsiG I (Age I)



Product No : RE1126  
Quantity : 100u



Lot :  
Expiry Date :  
Concentration : 5u/μl  
Supplied with : 1ml of 10X Buffer V3  
1ml of 10X Buffer UB  
0.5ml Diluent Viva Buffer A  
(BSA included in all Reaction Buffer)  
Store at -20°C



info@vivantechnologies.com

#### Reaction Conditions:

##### Buffer V3 ,

50mM Tris-HCl (pH 7.5 at 30°C), 10mM MgCl<sub>2</sub>, 100mM NaCl, and 100μg/ml BSA.

**Incubate at 37°C.**

##### Dilution: Viva Buffer A

10mM Tris-HCl (pH 7.4 at 25°C), 50mM KCl, 0.1mM EDTA, 1mM DTT, 200μg/ml BSA and 50% glycerol.

**Thermal Inactivation:** 65°C for 20 minutes

##### Storage Buffer:

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

##### Unit Definition:

1u is defined as the amount of enzyme that is required to digest 1μg of DNA in 1 hour at 37°C in 50μl of assay buffer.

#### Quality Control Assays:

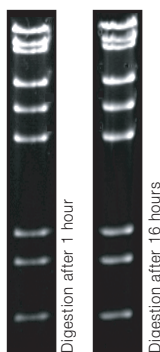
##### Ligation/ Recutting Assay:

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.

λ DNA  
0.7% Agarose



| Activity in Reaction Buffer |      |      |     |     |
|-----------------------------|------|------|-----|-----|
| V1                          | V2   | V3   | V4  | V5  |
| 50%                         | 100% | 100% | 50% | 75% |

| Buffer UB |      |      |      |
|-----------|------|------|------|
| 0.5X      | 1.0X | 1.5X | 2.0X |
| 50%       | 75%  | 50%  | 75%  |

\* Buffer UB is provided for double digestion purpose.

#### NOTE:

- \* Total reaction volume dependent on experiment.
- \* The amount of enzyme to be used is very much dependent on the DNA template.
- \* For plasmid DNA, 5-10X more enzyme is required.

#### Example of Digestion Reaction

Enzyme : 1 unit  
Lambda 0.3μg/μl : 3.33μl (1μg DNA)  
10X Reaction Buffer : 5μl  
Sterile Distilled Water : Up to 50μl

#### Product Use Limitation

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