

### Vha464 I (Afl II)



Product No : RE1358  
Quantity : 600u



Lot :  
Expiry Date :  
Concentration : 8u/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



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#### Reaction Conditions:

##### Buffer V3,

50mM Tris-HCl (pH 7.5 at 30°C), 10mM MgCl<sub>2</sub>,  
10mM 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), 200mM KCl, 0.1mM EDTA,  
7mM 2-mercaptoethanol, 200μg/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:

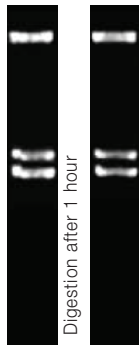
##### Ligation/ Recutting Assay:

After 8-fold overdigestion with **Vha464 I**, 40% of the  
DNA fragments can be ligated and recut.

λ DNA  
0.7% Agarose

##### Overdigestion assay:

An unaltered banding pattern was observed after 1μg of  
DNA was digested with 16u of **Vha464 I** for 16 hours at  
37°C.



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

Buffer UB			
0.5X	1.0X	1.5X	2.0X
75%	75%	75%	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.