# v i v a n t i s

#### RESTRICTION ENDONUCLEASE

#### **Product Datasheet**



5'...CCANNNNTGG...3' 3'...GGTNNNNNACC...5'

: RE1108 Product No Quantity



Lot **Expiry Date** 

Concentration  $1u/\mu l$ Supplied with 1ml of 10X Buffer V2

> 1ml of 10X Buffer UB 0.5ml Diluent Viva Buffer A

(BSA included in all Reaction Buffer)



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### **Reaction Conditions:**

# Buffer V2,

10mM Tris-HCI (pH 7.5 at 30°C), 10mM MgCl<sub>2</sub>,

50mM 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-HCI (pH 7.5), 50mM KCI, 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:**

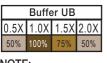
#### Ligation/ Recutting Assav:

After 1-fold overdigestion with AccB7 I, 95% of the DNA fragments can be ligated and recut.

# Overdigestion assay:

An unaltered banding pattern was observed after 1µg of DNA was digested with 2u of AccB7 I for 16 hours at 37°C.

V1 V2 V3 V4 V5	r	Activity in Reaction Buffer					
050/ 4000/ 4000/ 4000/ 750/		V5	V4	V3	V2	V1	
<b>25%</b>   100%   100%   100%   75%		75%	100%	100%	100%	25%	



\* Buffer UB is provided for double digestion purpose.

### NOTE:

- High enzyme concentration may result in Star Activity.
- Overdigestion in Buffer V2 will cause Star Activity.
- Blocked by overlapping dcm-methylation.
- 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(dam-& dcm-) 0.3µg/µl : 3.33µl (1µg DNA)

10X Reaction Buffer : 5ul Sterile Distilled Water : Up to 50µl

Product Use Limitation

This product is for research purposes and in vitro use only. V i V a 11 t i S | www.vivantechnologies.com

λDNA (dam & dcm ) 0.7% Agarose