v i v a n t i s

RESTRICTION ENDONUCLEASE

Product Datasheet



5'...GGNNCC...3' 3'...CCNNGG...5' Product No : RV1152 Quantity : 400u



Lot Expiry Date

Concentration : $20u/\mu l$ Supplied with : 1ml of

1ml of 10X Buffer V5 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 V5,

30mM Tris-acetate (pH 7.9 at 30°C), 10mM Mg-acetate, 60mM K-acetate, 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, $200\mu g/ml$ BSA and 50% glycerol.

Thermal Inactivation: 65°C for 20 minutes

Storage Buffer:

10mM Tris-HCl (pH 7.5), 50mM KCl, 0.1mM EDTA, 7mM 2-mercaptoethanol, 200 μ g/ml BSA and 50% glycerol.

Unit Definition:

1u is defined as the amount of enzyme that is required to digest $1\mu g$ of DNA in 1 hour at $37^{\circ}C$ in $50\mu l$ of assay buffer.

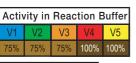
Quality Control Assays:

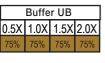
Ligation/ Recutting Assay:

After 20-fold overdigestion with *Bmi* I, 95% of the DNA fragments can be ligated and recut.

Overdigestion assay:

An unaltered banding pattern was observed after $1\mu g$ of DNA was digested with 40u of **Bmi I** for 16 hours at $37^{\circ}C$.





* 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 $0.3\mu g/\mu l$: $3.33\mu l$ ($1\mu g$ DNA)

10X Reaction Buffer : 5μl

Sterile Distilled Water : Up to $50\mu l$

Product Use Limitation

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

V i V a n t i S | www.vivantechnologies.com



