#### **Product Datasheet**

5'...**GCCNNNNNGGC**...3' 3'...CGGNNNNNCCG...5'

Product No: RV1142 Quantity : 600u

Lot **Expiry Date** 

Concentration  $10u/\mu l$ 

Supplied with 1ml of 10X Buffer Bal I 1ml of 10X Buffer UB

0.5ml Diluent Viva Buffer A (BSA included in all Reaction Buffer)

Store at -20°C

info@vivantechnologies.com

λDNA

0.7% Agarose

### Reaction Conditions:

Buffer Bgl I,

20mM Tris-HCI (pH 8.5), 10mM MgCl<sub>2</sub>, 200mM NaCl and 1mM DTT.

Incubate at 37°C.

Dilution: Viva Buffer A

10mM Tris-HCI (pH 7.4 at 25°C), 50mM KCI, 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), 200mM NaCI, 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 5-fold overdigestion with Bgl I, about 95% of the DNA fragments can be ligated and

#### Overdigestion assay:

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

Activity in Reaction Buffer						
V1	V2	V3	V4	V5		
25%	10%	10%	10%	25%		

Buffer UB						
0.5X	1.0X	1.5X	2.0X			
25%	25%	10%	25%			

\* Buffer UB is provided for double digestion purpose.

### NOTF:

- \* High enzyme concentration may result in Star Activity.
- 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

3.33µl (1µg DNA) Lambda 0.3µg/µl

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

> Product Use Limitation This product is for research purposes and in vitro use only.

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