

RESTRICTION ENDONUCLEASE

#### **Product Datasheet**



5'...**GRCGYC**...3' 3'...**CYGCRG**...5' Product No: RV1194 Quantity: 400u



Lot : Expiry Date :

 $\begin{array}{lll} \mbox{Concentration} & : & 10 \mbox{u}/\mbox{\mu} \mbox{l} \\ \mbox{Supplied with} & : & 1 \mbox{mI of 10X Buffer V4} \end{array}$ 

1ml of 10X Buffer UB

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



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λDNA

1.0% Agarose

after 1 hou

## Reaction Conditions:

## Buffer V4

10mM Tris-HCl (pH 8.5 at 30°C), 10mM MgCl<sub>2</sub>,

100mM KCl, 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: None

### Storage Buffer:

10mM Tris-HCl (pH 7.5), 200mM KCl, 0.1mM EDTA, 7mM 2-mercaptoethanol, 200 $\mu$ 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:

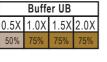
#### Ligation/ Recutting Assay:

After 10-fold overdigestion with **BssN 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 20u of **BssN I** for 16 hours at  $37^{\circ}C$ .

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



<sup>\*</sup> 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 : 5แ

Sterile Distilled Water : Up to 50µl

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