Product Datasheet

RESTRICTION ENDONUCLEASE



5'...TTTAAA...3' 3'...AAATTT...5' Product No: RE1254 Quantity: 600u



Lot : Expiry Date :

Concentration: 20u/µl Supplied with: 1ml of 10X Buffer V2

> 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

after 16 hours

Reaction Conditions:

Buffer V2,

10mM Tris-HCl (pH 7.5 at 30°C), 10mM MgCl₂, 50mM NaCl, and 100 μ g/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 μ g/ml BSA and 50% glycerol.

Thermal Inactivation: 65°C for 20 minutes

Storage Buffer:

10mM Tris-HCl (pH 7.5), 250mM NaCl, 0.1mM EDTA, 7mM 2-mercaptoethanol, 100μg/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.

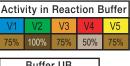
Quality Control Assays:

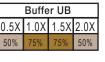
Ligation/ Recutting Assay:

After 20-fold overdigestion with $\textit{Dra}\ I,$ about 70% 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 Dra I for 16 hours at $37^{\circ}\text{C}.$





^{*} 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 50µl

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