v *i* v a n t *i* s

RESTRICTION ENDONUCLEASE

Product Datasheet



5'...GTMKAC...3' 3'...CAKMTG...5' Product No : RE1268 Quantity : 150u

Lot Expiry Date

Concentration : 2u/µl

Supplied with : 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



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λ DNA 0.7% Agarose

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 55°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: None

Storage Buffer:

10mM Tris-HCl (pH 7.5), 200mM NaCl, 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 $1\mu g$ of DNA in 1 hour at $55^{\circ}C$ in $50\mu l$ of assay buffer.

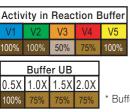
Quality Control Assays:

Ligation/ Recutting Assay: After 2-fold overdigestion w

After 2-fold overdigestion with *FbI* I, 90% of the DNA fragments can be ligated and recut.

Overdigestion assay:

An unaltered banding pattern was observed after 1 μ g of DNA was digested with 4u of *FbI* I for 16 hours at 55°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.

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