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

RESTRICTION ENDONUCLEASE

Product Datasheet

Fvu II 5'...CAGCTG...3' 3'...GTCGAC...5'

Product No : RE1322 Quantity : 800u



Lot : Expiry Date :

Concentration : 10u/µl Supplied with : 1ml of

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



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λDNA

0.7% Agarose

Reaction Conditions:

Buffer V2,

10mM Tris-HCl (pH 7.5 at 30°C), 10mM MgCl $_2$, 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, 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 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°C in 50 μ l of assay buffer.

Quality Control Assays:

Ligation/ Recutting Assay:

After 10-fold overdigestion with $\textit{Pvu}\ II$, 90% 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 \emph{Pvu} II for 16 hours at $37^{\circ}C.$

Activity in Reaction Buffer						
V1	V2	V3	V4	V5		
75%	100%	50%	25%	50%		

Buffer UB						
0.5X	1.0X	1.5X	2.0X			
50%	50%	10%	10%			

^{*} Buffer UB is provided for double digestion purpose.

NOTE:

- * 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

Lambda 0.3μg/μl : 3.33μl(1μg 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.