

Product No : FDRE1120
Quantity : 25 preps

Lot :
Expiry Date :
Concentration : 3u/μl
Supplied with : 1ml of 10X Buffer FD



Store at -20°C



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Storage Buffer:

10mM Tris-HCl (pH 7.5), 200mM NaCl, 0.1mM EDTA,
7mM 2-mercaptoethanol, 200μg/ml BSA and 50% glycerol.

Unit Definition:

3u (1μl) is defined as the amount of enzyme that is required to digest 1μg of DNA within 15 minutes at 37°C in 20μl or 50μl of assay buffer.

Thermal inactivation:

65°C for 20 minutes.

Quality Control Assays:

Ligation/ Recutting Assay:

After 3-fold overdigestion with **Alu I**, 90% of the DNA fragments can be ligated and recut.

Overdigestion assay:

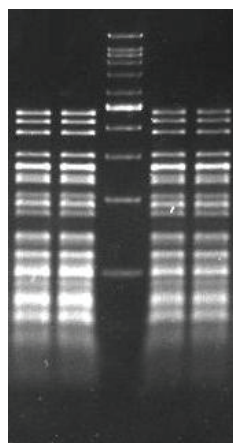
An unaltered banding pattern was observed after 1μg of DNA was digested with 6u of **Alu I** for 16 hours at 37°C.

Example of Digestion Reaction:

Reagents	20μl Assay Buffer	50μl Assay Buffer
Enzyme	1μl	2μl
Lambda DNA 0.5μg/μl	2μl	2μl
10X Buffer FD	2μl	5μl
Sterile Distilled Water	Up to 20μl (high yield)	Up to 50μl (low yield)

Assay Volume	Incubation Time (mins)		
	5	10	15
20μl	V	V	V
50μl	V	V	V

Digestion of λ DNA in 20μl assay after 5 mins



Digestion of λ DNA in 50μl assay after 5 mins

0.7% Agarose

Figure: 1μg DNA fragments were completely digested within 15 mins of incubation time at 37°C using 1μl & 2μl of **Alu I** in 20μl & 50μl assay buffer respectively.

Note:

- *High enzyme concentration may result in Star Activity.
- *Total reaction volume dependent on experiment.
- *For plasmid DNA, 2-3X more enzymes are required.
- *Concentration of enzyme may be different according to different batch.

Product Use Limitation

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