

Product No : FDRV1144  
Quantity : 50 preps

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



Store at -20°C



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**Storage Buffer:**

10mM Tris-HCl (pH 7.5), 50mM KCl, 0.1mM EDTA, 1mM DTT, 200μg/ml BSA and 50% glycerol.

**Unit Definition:**

10u (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:**

None.

**Quality Control Assays:**

**Ligation/ Recutting Assay:**

After 10-fold overdigestion with **Bgl II**, 90% of the DNA fragments can be ligated and recut.

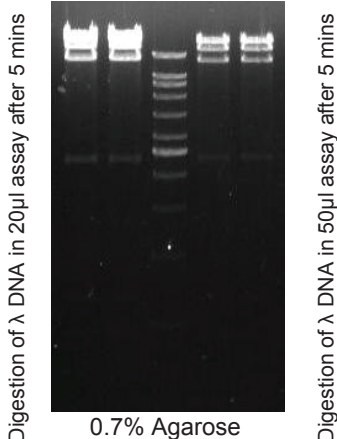
**Overdigestion assay:**

An unaltered banding pattern was observed after 1μg of DNA was digested with 20u of **Bgl II** 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



**Figure:** 1μg DNA fragments were completely digested within 15 mins of incubation time at 37°C using 1μl & 2μl of **Bgl II** 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.