

## Reaction Conditions:

Buffer V3 , 50mM Tris-HCl (pH 7.5 at 30°C), 10mM MgCl<sub>2</sub>, 100mM NaCl, and 100 $\mu$ g/ml BSA. Incubate at 60°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), 50mM KCl, 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 1µg of DNA in 1 hour at 60°C in 50µl of assay buffer.

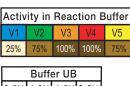
## Quality Control Assays:

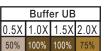
## Ligation/ Recutting Assay:

After 15-fold overdigestion with **BssT1 I**, more than 95% of the DNA fragments can be ligated and recut.

## Overdigestion assay:

An unaltered banding pattern was observed after 1µg of DNA was digested with 30u of **BssT1 I** for 16 hours at 60°C.





 $<sup>^{\</sup>ast}$  Buffer UB is provided for double digestion purpose.

# NOTE:

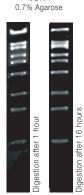
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- \* High enzyme concentration may result in Star Activity.
- \* Total reaction volume dependent on experiment.
- \* The amount of enzyme to be used is very much dependent on the DNA template.
- \* For plasmid DNA, 5-10X more enzyme is required.

Example of Digestion I	Reaction
Enzyme	: 1 unit
Lambda 0.3µg/µl 10X Reaction Buffer	: 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.



λDNA