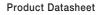
# v*i*vant*i*s

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#### **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 37°C.

#### Dilution: Viva Buffer A

10mM Tris-HCl (pH 7.4 at 25°C), 50mM KCl, 0.1mM EDTA, 1mM DTT, 200 $\mu g/ml$  BSA and 50% glycerol.

### Thermal Inactivation: None

#### Storage Buffer:

10mM Tris-HCI (pH 7.5), 50mM KCI, 0.1mM EDTA, 7mM 2-mercaptoethanol, 100µg/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 37°C in 50µl of assay buffer.

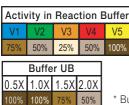
## Quality Control Assays:

#### Ligation/ Recutting Assay:

After 20-fold overdigestion with **DseD I**, more than 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 40u of **DseD I** for 16 hours at 37°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 DNA 0.3µg/µl	:	3.33µl (1µg DNA)
10X Reaction Buffer	:	5µl
Sterile Distilled Water	:	Up to 50µl

Product Use Limitation

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



