

# **Reaction Conditions:**

Buffer V1, 10mM Tris-HCI (pH 7.5 at 30°C), 10mM MgCl<sub>2</sub>, and 100µg/ml BSA. Incubate at 37°C.

# Dilution: Viva Buffer A

10mM Tris-HCI (pH 7.4 at 25°C), 50mM KCI, 0.1mM EDTA, 1mM DTT, 200µg/ml BSA and 50% glycerol.

# Thermal Inactivation: 65°C for 20 minutes

#### Storage Buffer:

10mM Tris-HCI (pH 7.5), 50mM KCI, 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 37°C in 50µl of assay buffer.

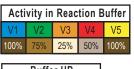
# Quality Control Assays:

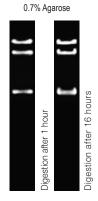
#### Ligation/ Recutting Assay:

After 30-fold overdigestion with PspC I, 90% of the DNA fragments can be ligated and recut.

Overdigestion assay:

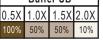
An unaltered banding pattern was observed after 1µg of DNA was digested with 60u of PspC I for 16 hours at 37°C.





λDNA

Buffer UB



\* 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 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.