

## Sse9 I (TspE I)



Product No : RE1342

Quantity : 200u



Lot :  
Expiry Date :  
Concentration : 5u/μl  
Supplied with : 1ml of 10X Buffer V1  
1ml of 10X Buffer UB  
0.5ml Diluent Viva Buffer A  
(BSA included in all Reaction Buffer)

Store at -20°C



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### Reaction Conditions:

#### Buffer V1 ,

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

**Incubate at 55°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:** 65°C for 20 minutes

#### Storage Buffer:

10mM Tris-HCl (pH 7.5), 200mM NaCl, 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 55°C in 50μl of assay buffer.

#### Quality Control Assays:

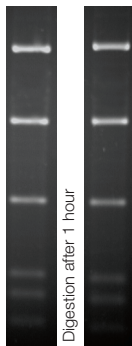
##### Ligation/ Recutting Assay:

After 5-fold overdigestion with **Sse9 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 10u of **Sse9 I** for 16 hours at 55°C.

pBR322 DNA  
1.4% Agarose



#### Activity in Reaction Buffer

V1	V2	V3	V4	V5
100%	75%	25%	50%	75%

#### Buffer UB

0.5X	1.0X	1.5X	2.0X
75%	50%	25%	10%

\* Buffer UB is provided for double digestion purpose.

#### NOTE:

- \* Overdigestion in Buffer V2 and V5 will cause **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 Reaction

Enzyme : 1 unit  
pBR322 DNA 0.3μg/μl : 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.