RESTRICTION ENDONUCLEASE

Product Datasheet

Sal I

5'...GTCGAC...3' 3'...CAGCTG...5'

Product No : RV1326 Quantity : 1000u

Lot Expiry Date

Concentration : 10u/µl

Supplied with : 1ml of 10X Buffer V3 1ml of 10X Buffer UB

0.5ml Diluent Viva Buffer A

(BSA included in all Reaction Buffer)

Store at -20°C



info@vivantechnologies.com

Reaction Conditions:

Buffer V3,

50mM Tris-HCl (pH 7.5 at $30^{\circ}C),\ 10mM\ MgCl_{2},\ 100mM\ NaCl,\ and\ 100\mu g/ml\ BSA.$

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), 100mM NaCl, 0.1mM EDTA, 7mM 2-mercaptoethanol 100 μ g/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.

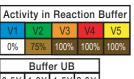
Quality Control Assays:

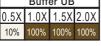
Ligation/ Recutting Assay:

After 10-fold overdigestion with \pmb{Sal} I, more than 90% of the DNA fragments can be ligated and recut.

Overdigestion assay:

An unaltered banding pattern was observed after $1\mu g$ of DNA was digested with 20u of **Sal I** for 16 hours at $37^{\circ}C$.





* Buffer UB is provided for double digestion purpose.

NOTE:

- * High enzyme concentration may result in Star Activity.
- * Blocked by CpG-methylation
- * 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 (Hind III Digest) 0.3μg/μI : 3.33μI (1μg DNA)

10X Reaction Buffer : 5μl

Sterile Distilled Water : Up to $50\mu l$

Product Use Limitation

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

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λ DNA (Hind III Digest) 0.7% Agarose

