vivantis

RESTRICTION ENDONUCLEASE

Product Datasheet

*Bse*21 I (*Sau* I)

5'...CCTNAGG...3'
3'...GGANTCC...5'

Product No	:	RE1170
Quantity	:	400u

Lot	:	
Expiry Date	:	
Concentration	:	20u/µl
Supplied with	:	1ml of 10X Buffer V5
		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 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, 200µg/ml BSA and 50% glycerol.

Thermal Inactivation: None

Storage Buffer:
10mM KH_2PO_4(pH 7.4), 50mM KCl, 0.1mM EDTA, 7mM 2-mercaptoethanol, 200µg/ml BSA and 50% glycerol.

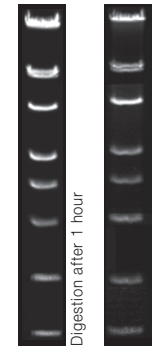
Unit Definition:
1u is defined as the amount of enzyme that is required to digest 1µg of DNA in 1 hour at 37°C in 50µl of assay buffer.

Quality Control Assays:

Ligation/ Recutting Assay:
After 20-fold overdigestion with ***Bse*21 I**, 50% of the DNA fragments can be ligated by using high concentration of T4 DNA ligase and of these more than 90% can be recut.

Overdigestion assay:
An unaltered banding pattern was observed after 1µg of DNA was digested with 40u of ***Bse*21 I** for 16 hours at 37°C .

λ DNA
(Hind III Digest)
0.7% Agarose



Activity in Reaction Buffer				
V1	V2	V3	V4	V5
100%	100%	100%	75%	100%

Buffer UB			
0.5X	1.0X	1.5X	2.0X
100%	100%	75%	75%

* Buffer UB is provided for double digestion purpose.

NOTE:
* Overdigestion in Buffer V3 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
Lambda (*Hin*d III Digest) 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.