vivantis

RESTRICTION ENDONUCLEASE

Product Datasheet

MhlI (Sdu I)

5'...GDGCHC...3'
3'...CHCGDG...5'

Product No : RE1292
Quantity : 200u

Lot :
Expiry Date :
Concentration : 5u/µl
Supplied with : 1ml of 10X Buffer UB
0.5ml of Diluent Viva Buffer A
(BSA included in all Reaction Buffer)
Store at -20°C

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Reaction Conditions:
Buffer 1.5X UB,
37.5mM Tris-acetate (pH 7.6 at 30°C), 15mM Mg-acetate, 150mM K-acetate, 10.5mM 2-mercaptoethanol and 75µg/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: 80°C for 20 minutes

Storage Buffer:
10mM Tris-HCl (pH 7.5), 100mM NaCl, 0.1mM EDTA, 7mM 2-mercaptoethanol, 200µg/ml BSA and 50% glycerol.

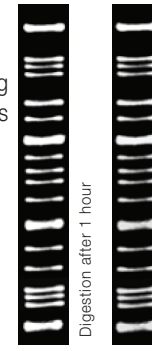
Unit Definition:
1u is defined as the amount of enzyme that is required to digest 1µg of DNA in 1 hour at 37°C in 50µl of assay buffer.

Quality Control Assays:

Ligation/ Recutting Assay:
After 5-fold overdigestion with ***MhlI***, 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 ***MhlI*** for 16 hours at 37°C.

λ DNA
1.0% Agarose



Activity in Reaction Buffer				
V1	V2	V3	V4	V5
25%	50%	50%	25%	75%

Buffer UB			
0.5X	1.0X	1.5X	2.0X
50%	50%	100%	75%

* Buffer UB is provided for double digestion purpose.

NOTE:

* High enzyme concentration may result in ***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 (0.3µg/µl)	:	3.33µl (1µg DNA)
10X Reaction Buffer	:	7.5µl
Sterile Distilled Water	:	Up to 50µl