

MroN I (*Nae* I*)



Product No. : RE1298

Quantity : 150u



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 MgCl₂,
 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 Tris-HCl (pH 7.5), 250mM NaCl, 0.1mM EDTA,
 7mM 2-mercaptoethanol, 200μg/ml BSA and 50% glycerol.

Unit Definition:

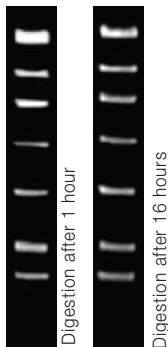
1u is defined as the amount of enzyme that is required to digest
 1μg of DNA in 1 hour at 37°C in 50μl of assay buffer.

Quality Control Assays:

Ligation/ Recutting Assay:

After 5-fold overdigestion with *MroN* I, more than 90%
 of the DNA fragments can be ligated and recut.

λ DNA
 (*Hind* III Digest)
 0.7% Agarose



Overdigestion assay:

An unaltered banding pattern was observed after 1μg of
 DNA was digested with 10u of *MroN* I for 16 hours at
 37°C.

Activity in Reaction Buffer				
V1	V2	V3	V4	V5
100%	50%	10%	10%	10%

Buffer UB			
0.5X	1.0X	1.5X	2.0X
75%	10%	10%	10%

* 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 (*Hind* 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.