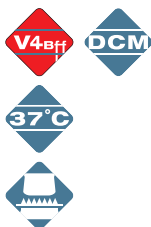


Msp20 I (Bal I)



Product No : RE1304
Quantity : 50u



Lot : 1022F20
Expiry Date : June 2020
Concentration : 3u/μl
Supplied with : 1ml of 10X Buffer V4
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 V4 ,

10mM Tris-HCl (pH 8.5 at 30°C), 10mM MgCl₂,
100mM KCl, 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: 65°C for 20 minutes

Storage Buffer:

10mM Tris-HCl (pH 7.5), 200mM 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 3-fold overdigestion with **Msp20 I**, 80% of
the DNA fragments can be ligated and recut.

λ DNA
(dam⁻ & dcm⁻)
0.7% Agarose

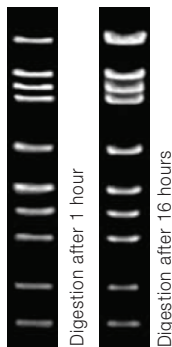
Overdigestion assay:

An unaltered banding pattern was observed after 1μg of
DNA was digested with 6u of **Msp20 I** for 16 hours at
37°C.

Activity in Reaction Buffer				
V1	V2	V3	V4	V5
75%	75%	50%	100%	100%

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

* Buffer UB is provided for double digestion purpose.



NOTE:

- * Blocked by dcm 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(dam⁻&dcm⁻)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.