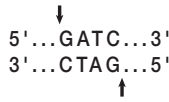


**BstMB I**  
(Mbo I)



Product No : RE1228  
Quantity : 200u



Lot :  
Expiry Date :  
Concentration : 10u/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 MgCl<sub>2</sub>,  
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:** 80°C for 20 minutes

**Storage Buffer:**

10mM Tris-HCl (pH 7.5), 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 65°C in 50μl of assay buffer.

**Quality Control Assays:**

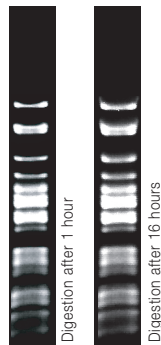
**Ligation/ Recutting Assay:**

After 10-fold overdigestion with **BstMB I**, more  
than 90% 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 **BstMB I** for  
16 hours at 65°C.

λ DNA  
(dam- & dcm-)  
1.2% Agarose



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

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

\* Buffer UB is provided for double digestion purpose.

**NOTE:**

- \* Blocked by overlapping dam-methylation.
- \* Overdigestion in Buffer 0.5X, 1X and 1.5X UB 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(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.