| v <i>i</i> vant | t i s | | |
|--------------------------|---------------------------|-----------------|--|
| RESTRICTION ENDONUCLEASE | | | Product Datasheet |
| BssM I | ↓ 5'GATC3' 3'CTAG5' | | Product No : RV1192 Quantity : 100u |
| (Mbo I) | | 1ml of 0.5ml | 10X Buffer UB of Diluent Viva Buffer A in all Reaction Buffer) |
| | Store at -20°C | i | info@vivantechnologies.com |

Reaction Conditions:

Buffer 2X UB,

50mM Tris-acetate (pH 7.6 at 30°C), 20mM Mg-acetate, 200mM K-acetate, 14mM 2-mercaptoethanol and 100 μ g/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, 200 $\mu g/ml$ BSA and 50% glycerol.

Thermal Inactivation: None

Storage Buffer:

10mM Tris-HCI (pH 7.5), 200mM KCI, 0.1mM EDTA, 7mM 2-mercaptoethanol, 200µg/ml BSA and 50% glycerol.

Unit Definition:

1 u 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.

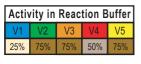
Quality Control Assays:

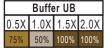
Ligation/ Recutting Assay:

After 2-fold overdigestion with **BssM I**, more than 95% of the DNA fragments can be ligated and recut.

Overdigestion assay:

An unaltered banding pattern was observed after $1\mu g$ of DNA was digested with 4u of **BssM I** for 16 hours at 37°C.





* 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 DNA (0.3µg/µl) | | 3.33µl (1µg DNA) | | |
| 10X Reaction Buffer | | 10µl | | |
| Sterile Distilled Water | | Up to 50µl | | |

Product Use Limitation

This product is for research purposes and in vitro use only.

