vivantis

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Product Datasheet

# *Bme*18 I (*Ava* II)

5'...GGWCC...3'
3'...CCWGG...5'

**Product No :RE1148**
**Quantity :600u**


Lot :
Expiry Date :
Concentration : 10u/µl
Supplied with : 1ml of 10X Buffer V3
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 V3 ,**
50mM Tris-HCl (pH 7.5 at 30°C), 10mM $MgCl_2$,
100mM NaCl, 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

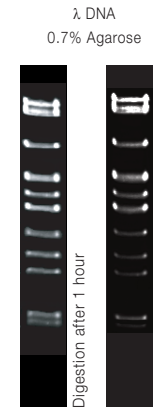
**Storage Buffer:**
10mM Tris-HCl (pH 7.5), 100mM NaCl, 0.1mM EDTA,
7mM 2-mercaptoethanol, 100µg/ml BSA and 50% glycerol.

**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 10-fold overdigestion with ***Bme*18 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 20u of ***Bme*18 I** for 16 hours at 37°C.




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

| Buffer UB | | | |
|---|---|---|---|
| 0.5X | 1.0X | 1.5X | 2.0X |
| 75% | 100% | 100% | 100% |

* 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 0.3µg/µl | : | 3.33µl (1µg DNA) |
| 10X Reaction Buffer | : | 5µl |
| Sterile Distilled Water | : | Up to 50µl |