

# **CERTIFICATE OF ANALYSIS**

Source: Bacillus megaterium 18.

# Bme18 I (Avall Eco471)

Recognition Sequence:						
L	<b>E030</b> 5 000 units 10,000 u/ml					

CCWGTG Lot: see label Exp: see label

Store at -20C

GTCMCC

SibEnzyme®

SE-Buffers	В	G	0	w	Y	ROSE
%Activity	10-25	25-50	100	75-100	10-25	80

**37°C** 65°C Ο λ



Ph/F+7(383)333-6853 info@sibenzyme.com www.sibenzyme.com Supplied in: 10 mM Tris-HCl (pH 7.5), 100 mM NaCl, 0.1 mM EDTA, 7 mM 2-mercaptoethanol, 100 μg/ml BSA, 50% alycerol.

Reaction Conditions: 1X SE-Buffer O. Incubate at 37 °C.

 1X SE-Buffer O ( pH 7.6 @ 25 °C )

 50 mM Tris HCl
 100 mM NaCl

 10 mM MgCl2
 1 mM DTT

## Heat Inactivation:

Enzyme is inactivated by incubation at 65 °C for 20 minutes.

<u>Unit Definition</u>:One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 37 °C in a total reaction volume of 50 µl.

#### Quality Control Assays

<u>Ligation</u>:After 10-fold overdigestion with Bme18 I, more than 90% of the DNA fragments can be ligated and recut.

<u>16-Hour Incubation</u>: A 50 µl reaction containing 1 µg of DNA and 20 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

<u>Oligonucleotide Assay</u>:No detectable degradation of single-stranded and double-stranded oligonucleotide was observed after incubation with 10 units of restriction endonuclease for 3 hours.

### Enzyme Properties:

When using a buffer other than the optimal (Supplied) SE-Buffer, it may be necessary to add more enzymes to achieve complete digestion.

Reagents Supplied with Enzyme: 10X SE Buffer O.

Cleaved of DNA is impaired by overlapping dcm-methylation (  $\tt C^mCWGG$  ): <code>GGW<u>CCWGG</u>.</code>