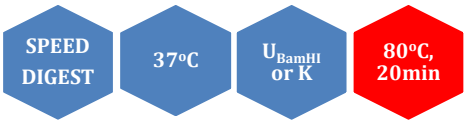
BamH I



5’ ···G▼GATCC···3’
3’ ···CCTAG▲G···5’

BamHI is a restriction enzyme purified from *Bacillus amyloliquefaciens* H.

Catalogue No	*103-1, 3000 U* *103-2, 3x8000 U*
Concentration	*10-12u/µl and 40-60u/µl**

**Add an H to cat.# to order the high concentration*

Reagents supplied: 10x U_{BamHI} and 10x K buffer.

Unit substrate: Lambda DNA.

Unit calculation assay conditions: 100 mM NaCl, 10 mM Tris-HCl (pH 7.9 @ 25°C), 5 mM $MgCl_2$, 1 mM dithiothreitol, 100 µg/ml BSA. Incubate at 37°C.

Absence of contaminants: 100 units of *Bam*HI incubated for 16 hours at 37°C with 1 µg of λ DNA resulted in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. After 50-fold overdigestion with *Bam*HI, greater than 95% of the DNA fragments can be ligated and recut with this enzyme.

Storage buffer: 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 0.1 mM EDTA, 1 mM dithiothreitol, 200 µg/ml BSA and 50% glycerol. Store at -20°C.

Heat inactivation: 80°C for 20 minutes.

Methylation Sensitivity:
dam methylation: Not sensitive
dcm methylation: Not sensitive
CpG methylation: Not sensitive

Star activity: Conditions of low ionic strength, high enzyme concentration, glycerol concentration>5% or pH>8.0 may result in star activity.

Percent Activity in MINOTECH Buffers

L	M	**H**	SH	A	**K**
75	75-100	**100**	50-75	75	**100**

General reaction mixture:

10U BamHI	1µl
10x U_{BamHI} or K buffer *	2µl
DNA substrate	<1µg
Sterile ultrapure water	Up to 20 µl

Incubate for 15 min at 37°C

**In the case of U_{BamHI} buffer we recommend the addition of BSA to a final concentration of 100 µg/ml.*

Frequency of Cutting

λ	Ad-2	Φx174	pUC18	M13mp18	pBR322
5	3	0	1	1	1

Lambda DNA 0.7 % agarose

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