BamHI

5’…G▼GATCC…3’
3’…CCTAG▲G…5’

Content:	Ref No.	250103S	color
	BamHI 10 U/µL	7500 units	blue
	10x buffer U_{BamHI}*	1x 1 mL	red
	10x buffer K	1x 1 mL	yellow
	Datasheet		

We recommend the use of buffer K as universal buffer (BSA included).

Lambda DNA BamHI digest, 0.7 % agarose

Storage: -20 °C

Concentration: 10 U/µL

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

Enzyme Properties:

1x buffer U_{BamHI} composition: 10 mM Tris-HCl (pH 7.9 at 25 °C), 100 mM NaCl, 5 mM $MgCl_2$, 1 mM Dithiothreitol

General reaction mixture:

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

Incubate for 15 min at 37 °C

Heat inactivation: 80 °C for 20 minutes.

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

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

Absence of contaminants: 100 units of BamHI 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 BamHI, greater than 95 % of the DNA fragments can be ligated and recut with this enzyme

Unit definition: One unit is defined as the amount of enzyme required to produce a complete digest of 1 µg Lambda DNA (dam^-) in 60 minutes in a total reaction volume of 0.05 mL under assay conditions.

Frequency of Cutting:

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

Percent Activity in BIORON Buffers:

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

*we recommend the addition of BSA to a final concentration of 100 µg/mL.

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