BseAI (BspMII)

5'...T▼CCGGA...3'
3'...AGGCC▲T...5'

Content:	Ref No.	250107S	color
	BseAI 10 U/µL	650 units	blue
	10x buffer U_{BseAI}*	1x 1 mL	red
	10x buffer K	1x 1 mL	yellow
	Datasheet		

Lambda DNA BseAI digest, 0.7 % agarose

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

Storage: -20 °C

Concentration: 10 U/µL

Source: BseAI is a restriction enzyme purified from *Bacillus stearothermophilus*.

Enzyme Properties:

1x buffer U_{BseAI} composition: 10 mM Tris-HCl (pH 8.0 at 25 °C), 100 mM NaCl, 5 mM $MgCl_2$, 1 mM Dithiothreitol, 0.02 % Triton X-100.

General reaction mixture:

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

Incubate for 15 min at 55 °C

Heat inactivation: No.

Methylation Sensitivity:
dam methylation: n.a.
dcm methylation: n.a.
CpG methylation: n.a.

Storage buffer: 10 mM Tris-HCl (pH 7.4), 50 mM KCl, 0.1 mM EDTA, 1 mM Dithiothreitol, 500 µg/ml BSA and 50 % glycerol. Store at -20 °C.

Absence of contaminants: 400 units of BseAI do not produce any unspecific cleavage products after 16 hrs incubation with 1 µg of Lambda DNA at 55 °C. After 100-fold overdigestion with BseAI, greater than 98 % 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 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
24	8	0	0	0	1

Percent Activity in BIORON Buffers:

L*	M*	H*	SH*	A*	K
10	50	75-100	50-75	10	**100**

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

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