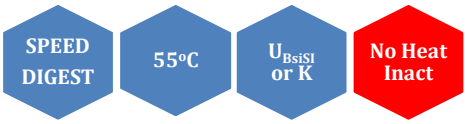
BsiS I (Hpa II isoschizomer)



5' ···C▼CGG···3'
3' ···GGC▲C···5'

BsiSI is a restriction enzyme purified from *Bacillus stearothermophilus*.

Catalogue No	*111-1, 2000 U* *111-2, 3x2000 U*
Concentration	*10-12u/µl and 40-60u/µl**

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

Reagents supplied: 10x U_{BsiSI} and 10x K buffer

Unit substrate: Lambda DNA.

Unit calculation assay conditions: 66 mM potassium acetate, 33 mM Tris-acetate (pH 7.9 @ 25°C), 10 mM magnesium acetate, 0.5 mM dithiothreitol, 0.1% Triton X-100, 100 µg/ml bovine serum albumin and DNA. Incubate at 55°C.

Absence of contaminants: 150 units of *Bsi*S I do not produce any unspecific cleavage products after 16 hrs incubation with 1 µg of Lambda DNA at 55°C. After 50-fold overdigestion with *Bsi*S I, 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, 1mM dithiothreitol, 200 µg/ml bovine serum albumin and 50% glycerol. Store at -20°C.

Heat inactivation: No.

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

Reference: Rina, M. and Bouriotis, V. (1990) Nucleic Acids Res: 18, 1654

Percent Activity in MINOTECH Buffers

L	M	H	SH	**A**	**K**
25	50	25	10-25	**100**	**100**

General reaction mixture:

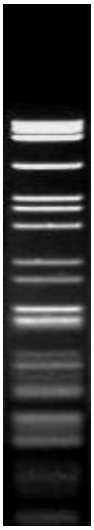
10U BsiSI	1µl
10x U_{BsiSI} or K buffer *	2µl
DNA substrate	<1µg
Sterile ultrapure water	Up to 20 µl

Incubate for 15 min at 55°C

**In the case of U_{BsiSI} 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
328	171	5	13	18	26



Lambda DNA 1.4 % agarose

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