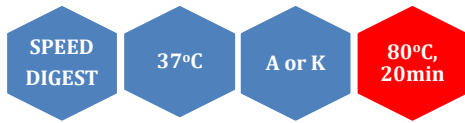


BshF I (Hae III isoschizomer)



5' ...GG▼CC...3'
3' ...CC▲GG...5'

BshFI is a restriction enzyme purified from *Bacillus sphaericus*.

Catalogue No 110-1, 2000 U
 110-2, 3x2000 U

Concentration 10-12u/μl and 40-60u/μl*

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

Reagents supplied: 10x A and 10x K buffer

Unit substrate: Lambda DNA.

Unit calculation assay conditions: 50 mM potassium acetate, 20 mM Tris-acetate (pH 7.9 @ 25°C), 10 mM magnesium acetate, 1 mM dithiothreitol, 100 μg/ml bovine serum albumin and DNA. Incubate at 37°C.

Absence of contaminants: 200 units of *BshF I* do not produce any unspecific cleavage products after 16 hrs incubation with 1 μg of Lambda DNA at 37°C. After 50-fold overdigestion with *BshF 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, 1 mM dithiothreitol, 200 μg/ml bovine serum albumin 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

Reference: Vlatakis, G., Clark, D. and Bouriotis, V. (1989). *Nucleic Acis Res.* 17, 8882

Percent Activity in MINOTECH Buffers

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

General reaction mixture:

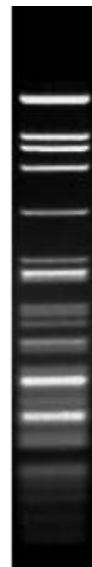
| | |
|-------------------------|-------------|
| 10U BshFI | 1μl |
| 10x A or K buffer * | 2μl |
| DNA substrate | <1μg |
| Sterile ultrapure water | Up to 20 μl |

Incubate for 15 min at 37°C

*In the case of A 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 |
|-----|------|-------|-------|---------|--------|
| 149 | 216 | 11 | 11 | 15 | 22 |



Lambda DNA 1.4 % agarose