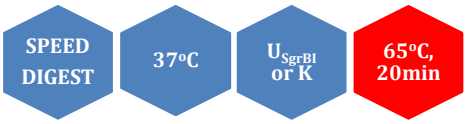
SgrB I (Sac II isoschizomer)



5' ···CCGC▼GG···3'
3' ···GG▲CGCC···5'

SgrBI is a restriction enzyme purified from *Streptomyces griseus.*

Catalogue No	*133-1, 2000 U* *133-2, 3x2000 U*
Concentration	*10-12u/µl and 40-60u/µl**

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

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

Unit substrate: Lambda DNA (HindIII digest).

Unit calculation assay conditions: 10 mM Tris-HCl (pH 7.9@ 25°C), 10 mM $MgCl_2$, 1 mM dithiothreitol, 0.1% Triton X-100, 100 µg/ml BSA. Incubate at 37°C.

Absence of contaminants: 400 units of *Sgr*B I do not produce any unspecific cleavage products after 16 hrs incubation with 1 µg of λ DNA (*Hind*III digest) at 37°C. After 100-fold overdigestion with *Sgr*BI, greater than 98% of the DNA fragments can be ligated and recut with this enzyme.

Storage buffer: 50 mM NaCl, 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: 65°C for 20 minutes.

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

Note: Particular sites in λ and ϕX174 DNAs are difficult to cleave with *Sgr*B I, as well as with its prototype *Sac* II.

Reference: Rina, M., Pagomenou, M. and V, Bouriotis (1991) Nucleic Acids Res. 19, 6342.

Percent Activity in MINOTECH Buffers

L	M	H	SH	A	**K**
75-100	75	50-75	25-50	<10	**100**

General reaction mixture:

10U SgrBI	1µl
10x U_{SgrBI} 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_{SgrBI} 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
4	33	1	0	0	0

Lambda DNA 0.7 % agarose

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