Sau3A I



5' ···▼GATC···3'
3' ···CTAG▲···5'

Sau3AI is a restriction enzyme purified from *Streptomyces* species.

<u>Catalogue No</u> 147-1, 500 U 147-2, 3x500 U

Concentration 10-12 $u/\mu l$ and 40-60 $u/\mu l^*$

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

Reagents supplied: 10x M and 10x K

buffer

Unit substrate: Lambda DNA.

Unit calculation assay conditions: 50 mM NaCl, 10 mM Tris-HCl (pH 7.9 @ 25°C), 10 mM MgCl₂, 1mM dithiothreitol, 100 μ g/ml BSA. Incubate at 37°C.

Absence of contaminants: 50 units of Sau3A I do not produce any unspecific cleavage products after 16 hrs incubation with 1 μ g of λ DNA at 37°C. After 50-fold overdigestion with Sau3A 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 $\mu g/ml$ 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 by overlapping

Percent Activity in MINOTECH Buffers

L	M	Н	SH	Α	К
50	100	50	<10	50	100

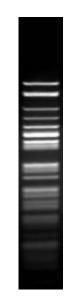
General reaction mixture:

10U Sau3AI	1μΙ			
10x M or K buffer *	2μΙ			
DNA substrate	<1µg			
Sterile ultrapure water	Up to 20 μl			
Incubate for 15 min at 37°C				

^{*}In the case of M buffer we recommend the addition of BSA to a final concentration of $100 \mu g/ml$.

Frequency of Cutting

λ	Ad-2	Фх174	pUC18	M13mp18	pBR322
116	87	0	15	7	22



Lambda DNA 1.4 % agarose

