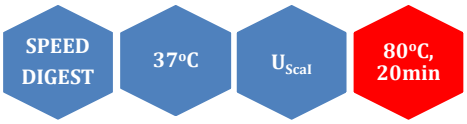
Sca I



5’ ···AGT▼ACT···3’
3’ ···TCA▲TGA···5’

ScaI is a restriction enzyme purified from *Streptomyces caespitosus.*

Catalogue No	*131-1, 1000 U* *131-2, 3x1000 U*
Concentration	*10-12u/µl and 40-60u/µl**

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

Reagents supplied: 10x U_{ScaI} buffer

Unit substrate: Lambda DNA.

Unit calculation assay conditions: 100 mM KCl, 10 mM Bis-Tris-Propane (pH 7.0 @ 25°C), 10 mM $MgCl_2$, 100 µg/ml BSA. Incubate at 37°C.

Absence of contaminants: 600 units of *Sca* I incubated for 16 hours at 37ºC with 1 µg of λ DNA resulted in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. After 100-fold overdigestion with *Sca* I, greater than 90% 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, 500 µg/ml BSA 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

Star activity: Large excess of the enzyme may results in the appearance of star activity.

Percent Activity in MINOTECH Buffers

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

General reaction mixture:

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

Incubate for 15 min at 37°C

**We recommend the addition of BSA to a final concentration of 100 µg/ml.*

Frequency of Cutting

λ	Ad-2	Φx174	pUC18	M13mp18	pBR322
5	5	0	1	0	1

Lambda DNA 0.7 % agarose

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