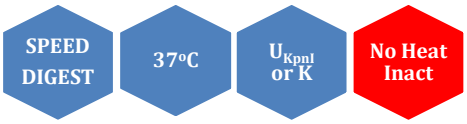
Kpn I



5’ ···GGTAC▼C···3’
3’ ···C▲CATGG···5’

KpnI is a restriction enzyme purified from *Klebsiella pneumonia* OK8.

Catalogue No	*119-1, 3000 U* *119-2, 3x3000 U*
Concentration	*10-12u/µl and 40-60u/µl**

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

Reagents supplied: 10x U_{KpnI} and 10x K buffer**.**

Unit substrate: Lambda DNA (EcoRI digest).

Unit calculation assay conditions: 10 mM Tris-HCl (pH 7.0 @ 25°C), 10 mM $MgCl_2$, 1 mM dithiothreitol, 0.01% Triton X-100, 100 µg/ml bovine serum albumin and DNA. Incubate at 37°C.

Absence of contaminants: 30 units of *Kpn* I do not produce any unspecific cleavage products after 16 hrs incubation with 1 µg of lambda DNA/*Eco*R I digest at 37°C. After 10-fold overdigestion with *Kpn*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: No.

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

Star activity: Conditions of low ionic strength, high enzyme concentration, glycerol concentration >5% or pH >8.0 may result in star activity.

Percent Activity in MINOTECH Buffers

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

General reaction mixture:

10U KpnI	1µl
10x U_{KpnI} 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_{KpnI} 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
2	8	0	1	1	0

Lambda DNA 0.7 % agarose

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