

Restriction  
Endonuclease



# Kzo9 I

Recognition  
Sequence:

↓ GATC  
CTAG ↑

S

**E187**

200 units  
3,000 u/ml

Lot:

Exp:

Store at -20°C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	50-75	100	50-75	50-75	50-75	100

37°C

65°C

G

λ

For more details  
scan the code



Ph/F+7(383)333-6853  
info@sibenzyme.com  
www.sibenzyme.com

## CERTIFICATE OF ANALYSIS

Source: *Kurthia zopfii* 9.

Supplied in:

10 mM Tris-HCl (pH 7.5), 50 mM KCl, 0.1 mM EDTA,  
7 mM 2-mercaptoethanol, 200 µg/ml BSA, and 50%  
glycerol.

Reaction Conditions:

1X SE-Buffer G. Incubate at 37° C.

1X SE-Buffer G (pH 7.6 @ 25° C):

10 mM Tris-HCl    50 mM NaCl  
10 mM MgCl<sub>2</sub>    1 mM DTT

Heat Inactivation:

Enzyme is inactivated by incubation at 65° C for 20  
minutes.

Unit Definition: One unit is defined as the amount of  
enzyme required to digest 1 µg of Lambda DNA in 1  
hour at 37° C in a total reaction volume of 50 µl.

Quality Control Assays

Ligation: After 3-fold overdigestion with Kzo9 I, >  
95% of the DNA fragments can be ligated with T4 DNA  
Ligase and recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg  
of DNA and 6 Units of enzyme incubated for 16 hours  
resulted in the same pattern of DNA bands as a reaction  
incubated for 1 hour.

Oligonucleotide Assay: No detectable degradation of a  
single-stranded and double-stranded oligonucleotide  
was observed after incubation with 3 units of restriction  
endonuclease for 3 hours.

Enzyme Properties:

When using a buffer other than the optimal (Supplied)  
SE-Buffer, it may be necessary to add more enzymes to  
achieve complete digestion.

Reagents Supplied with Enzyme:

10X SE Buffer G.

Not blocked by overlapping Dam methylation (G<sup>m</sup>ATC):  
GATC.

Blocked by overlapping CG methylation:  
CGAT<sup>m</sup>CG.

Cleaved of DNA is impaired by overlapping CG  
methylation: GAT<sup>m</sup>CG.