Restriction Endonuclease

Taq I

For more details

scen the code

Recog Seque		
S	E133 2,000 units 20,000 u/ml	



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TLCGA

AGCT

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Lot:

Exp:

CERTIFICATE OF ANALYSIS

<u>Source</u>: An E.coli strain, that carries the cloned gene Taq I from Thermus aquaticus.

<u>Supplied in:</u> 10 mM Tris-HCl (pH 7.5), 300 mM NaCl, 0.1 mM EDTA, 200 µg/ml BSA, 1 mM DTT, 50% glycerol.

Reaction Conditions:

1X SE-Buffer Y, BSA (100 $\mu g/ml).$ Incubate at 65° C.

 1X SE-Buffer Y (pH 7.9 @ 25° C):

 33 mM Tris-Ac
 66 mM KAc

 10 mM MgAc
 1 mM DTT

Heat Inactivation:

Enzyme is inactivated by incubation at 80°C for 20 minutes.

<u>Unit Definition</u>:One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA in 1 hour at 65° C in a total reaction volume of 50 µl. To obtain 100% activity, BSA should be added to the 1x reaction mix to a final concentration of 100 µg/ml.

Quality Control Assays

<u>Ligation</u>:After 20 fold digestion with Taq I, more than 95% of the DNA fragments can be ligated with T4 DNA Ligase and recut.

<u>16-Hour Incubation</u>: A 50 μ l reaction containing 1 μ g of DNA and 20 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

Do not use BSA for long incubation.

<u>Oligonucleotide Assay</u>:No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 20 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 Y, BSA (10 mg/ml).