

Restriction
Endonuclease



Tth111 I

Recognition
Sequence:

GACN↓NNGTC
CTGNN↑NCAG

S

E097

400 units
5,000 u/ml

Lot:

Exp:

Store at -20C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	75-100	50-75	10-25	10-25	100	100

65°C

80°C

Y

λ/HindIII

RR

For more details
scan the code



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CERTIFICATE OF ANALYSIS

Source: An *E. coli* strain that carries the cloned *Tth1111* gene from *Thermus Thermophilus 111*.

Supplied in:

10 mM Tris-HCl (pH 7.5), 500 mM NaCl, 0.1 mM EDTA,
1 mM DTT, 50% glycerol.

Reaction Conditions:

1X SE-Buffer Y. 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.

Unit Definition: One unit is defined as the amount of enzyme required to digest 1 µg of Lambda DNA/Hind III in 1 hour at 65° C in a total reaction volume of 50 µl.

Quality Control Assays

Ligation: After 2-fold overdigestion with Tth111 I, 10% 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 5 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

High enzyme concentration may result in star activity.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 5 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.