

Restriction
Endonuclease



CERTIFICATE OF ANALYSIS

Hind III



Recognition
Sequence:

A↓AGCTT
TTCGA↑A

Lot: 66
Exp: 09/20
Store at -20C

E074T
25,000 units
20,000 u/ml

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	10-25	25-50	0-10	100	0-10	100

37°C 80°C W λ RR TURBO

Description: Turbo Hind III can be used for short time (10-15 min) DNA digestion as well as for standard reaction. The reaction can be performed using optimal or universal (ROSE) Buffer. Buffer ROSE is perfect for double digestion.

Source: An *E.coli* strain that carries the cloned Hind III gene from *Haemophilus influenzae* Rd.

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

Reaction Conditions:
1x SE-Buffer W or 1xSE-Buffer ROSE. Incubate at 37°C

1X SE-Buffer W (pH 8.5@ 25°C): 10 mM Tris-HCl, 100 mM NaCl, 10 mM MgCl₂, 1 mM DTT

Heat Inactivation:
Enzyme is inactivated by incubation at 80°C for 20 min.

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

Quality Control Assays

Ligation: After 50-fold overdigestion with Hind III, approximately 90% of the DNA fragments can be ligated with high-activity T4 DNA Ligase and recut.

16-Hour Incubation: A 50 µl reaction containing 1 µg 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.

Oligonucleotide Assay: No detectable degradation of a single-stranded and double-stranded oligonucleotide was observed after incubation with 20 units of restriction endonuclease for 3 hours.

Reagents Supplied with Enzyme:
10x SE-Buffer W, 10x SE-Buffer ROSE

Turbo DNA Digestion:

Applications:

- Fast DNA analysis
- Fast preparation of vectors for cloning
- Double digestion

Enzyme Properties:

1 µl of Turbo Hind III cuts 1 µg of DNA in 1x SE-Buffer W or universal 1x SE-Buffer ROSE in 10-15 min (see the protocol below). Short time DNA digestion requires high quality purification of DNA sample. This enzyme can digest DNA at standard incubation time (1-16 hours) as well.

Turbo reaction protocol:

20 µl of the reaction volume:
Reaction Buffer (x10) - 2 µl
Plasmid DNA - 1-2 µl (up to 1 µg) or
PCR product - 5-10 µl (~0,2 µg)
Sterile water - up to 20 µl
+ 1 µl of Turbo Restriction Endonuclease
Incubate at 37°C for 10-15 min

For more details
scan the code



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