

Restriction
Endonuclease



EcoR I

Recognition
Sequence:

G↓AATC
CTTAA↑G

S

E939

10,000 units
20,000 u/ml

Lot:

Exp:

Store at -20C

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	10-25	100	0-10	0-10	100	40

37°C

65°C

Y

λ

RR

BSA

For more details
scan the code



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CERTIFICATE OF ANALYSIS

Source: An *E.coli* strain that carries the cloned *EcoR I* gene from *Escherichia coli*.

Supplied in:

10 mM KPO₄, 300 mM NaCl, 0.1 mM EDTA,
1 mM DTT, 200 µg/ml BSA, 50% glycerol. 0.15%
Triton X-100, pH7.0 @ 25 °C.

Reaction Conditions:

1× SE-Buffer Y, BSA (100 µg/ml). Incubate at 37 °C.

1X SE-Buffer Y (pH 7.9 @ 25° C):

33 mM Tris-HCl 66mM KAc
10 mM MgAc 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. To obtain 100% activity, BSA should be added to the 1 x reaction mix to a final concentration of 100 µg/ml. Do not use BSA for long incubation.

Quality Control Assays

Ligation: After 40-fold overdigestion with EcoR I, ~95% of the DNA fragments can be ligated and recut.

16-Hour Incubation: A 50 µl reaction containing in 1 µg of DNA and 40 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.

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).