

Restriction
Endonuclease



EcoR I

Recognition
Sequence:

G↓AATTC
CTTAA↑G

L

E058

25,000 units
20,000 u/ml

Lot:

Exp:

Store at -20C

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

37°C

65°C

EcoRI

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 Tris-HCl (pH 7.5), 200 mM NaCl, 0.1 mM EDTA,
7 mM 2-mercaptoethanol, 100 µg/ml BSA, 50%
glycerol.

Reaction Conditions:

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

1X SE-Buffer EcoR I (pH 7.6 @ 25° C):

100 mM Tris-HCl 50mM NaCl
10 mM MgCl₂ 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.
High enzyme concentration and using of nonoptimal
buffer may result in star activity.
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 EcoR I, BSA (10 mg/ml).