

Restriction  
Endonuclease



# EcoR V

Recognition  
Sequence:

GAT↓ATC  
CTA↑TAG

S

**E059**

2,000 units  
20,000 u/ml

Lot:

Exp:

**Store at -20C**

SE-Buffers	B	G	O	W	Y	ROSE
%Activity	0-10	25-50	50-75	100	25-50	50

37°C

No

W

λ

RR

For more details  
scan the code



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## CERTIFICATE OF ANALYSIS

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

Supplied in:

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

Reaction Conditions:

1XSE-Buffer W. Incubate at 37° C.

1X SE-Buffer W(pH 8.5 @ 25° C):

10 mM Tris-HCl    100 mM NaCl  
10 mM MgCl<sub>2</sub>    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.

Quality Control Assays

Ligation:After 20-fold overdigestion with EcoR V, ~90% 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 20 Units of enzyme incubated for 16 hours resulted in the same pattern of DNA bands as a reaction incubated for 1 hour.

Conditions of high enzyme concentration or long incubation with BSA may results in star activity.

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 W.