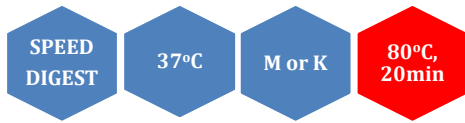


# EcoR V



5' ...GAT▼ATC...3'  
3' ...CTA▲TAG...5'

EcoRV is a restriction enzyme purified from *E. coli* J62pJg 74.

Catalogue No            115-1, 4000 U  
                                  115-2, 3x4000 U

Concentration            10-12u/μl and 40-60u/μl\*

\*Add an H to cat.# to order the high concentration

**Reagents supplied:** 10x M and 10x K buffer

**Unit substrate:** Lambda DNA.

**Unit calculation assay conditions:** 50 mM NaCl, 10 mM Tris-HCl (pH 7.9 @ 25°C), 10 mM MgCl<sub>2</sub>, 1 mM dithiothreitol, 100 μg/ml bovine serum albumin and DNA. Incubate at 37°C.

**Absence of contaminants:** 100 units of *EcoR V* do not produce any unspecific cleavage products after 16 hrs incubation with 1 μg of Lambda DNA at 37°C. After 20-fold overdigestion with *EcoR V*, greater than 95% of the DNA fragments can be ligated and recut with this enzyme.

**Storage buffer:** 50 mM KCl, 10 mM Tris-HCl (pH 7.4), 0.1 mM EDTA, 1 mM dithiothreitol, 200 μg/ml bovine serum albumin and 50% glycerol. Store at -20°C.

**Heat inactivation:** 80°C for 20 minutes..

**Methylation Sensitivity:**

dam methylation: Not sensitive  
dcm methylation: Not sensitive  
CpG methylation: Blocked by overlapping

**Star activity:** Conditions of low ionic strength, high enzyme concentration, glycerol concentration>5%, or pH>8.0 may result in star activity.

**Percent Activity in MINOTECH Buffers**

L	M	H	SH	A	K
10-25	100	50	<10	75	100

**General reaction mixture:**

10U EcoRV	1μl
10x M or K buffer *	2μl
DNA substrate	<1μg
Sterile ultrapure water	Up to 20 μl
<i>Incubate for 15 min at 37°C</i>	

\*In the case of M buffer we recommend the addition of BSA to a final concentration of 100 μg/ml.

**Frequency of Cutting**

λ	Ad-2	Φx174	pUC18	M13mp18	pBR322
21	9	0	0	0	1



Lambda DNA 1.0 % agarose