

## EcoR I



Source: *Escherichia coli* RY 13

	Cat.-No.	Size	Conc.
	EN-114S	15,000 units	10 u/ $\mu$ l
	EN-114L	75,000 units	10 u/ $\mu$ l

**NB:**  
**BSA is already included in the Buffer solution!**

**Buffer supplied: 10x EcoR I (incl. BSA).**

**Substrate for unit definition:**  $\lambda$  DNA (5 sites).

**Reaction conditions:**

50 mM NaCl, 100 mM Tris-HCl (pH 7.4), 5 mM MgCl<sub>2</sub>, 0.025% Triton X-100, 100  $\mu$ g/ml BSA.  
Digestion is performed in 5 minutes at **37°C**.

**Storage buffer:**

300 mM NaCl, 5 mM potassium phosphate buffer (pH 7.4), 0.1 mM EDTA, 1 mM dithiothreitol, 0.15% Triton X-100, 200  $\mu$ g/ml BSA, and 50% glycerol.  
Store at -20°C.

**Ligation and recutting:**

After 50-fold overdigestion with EcoR I, >98% of the DNA fragments can be ligated and recut with this enzyme.

**Star activity:**

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

**Methylation sensitivity:**

*dam* methylation: Not sensitive  
*dcm* methylation: Not sensitive  
CpG methylation: Impaired by overlapping

**Heat inactivation:** 65°C for 20 minutes.