

Product Description

EcoR I is a Type IIP restriction endonuclease expressed in *Escherichia coli* carrying the EcoR I gene cloned from *Escherichia coli* RY13 (R.N. Yoshimori). Its recognition and cleavage sequences are shown below:

5'...G ↓ AATTC...3'

3'...CTTAA ↑ G...5'

Components

Components	BR1G111-01 5,000 U	BR1G111-02 10,000 U	BR1G111-03 50,000 U
EcoR I (20 U/μL)	1×0.25 mL	1×0.5 mL	5×0.5 mL
10× Cut-Buffer	2×1 mL	3×1 mL	14×1 mL

Unit Definition

One unit is defined as the amount of enzyme required to completely digest 1 μg of λDNA in 1 h at 37°C.

Storage

Store at -20±5°C.

Notes

1. For research use only. Not for use in clinical diagnosis.
2. Mix thoroughly before use. Avoid repeated freeze-thaw cycles.
3. The volume of restriction endonuclease added should not exceed one-tenth of the total reaction volume.
4. Suitable for digestion of genomic DNA, plasmid DNA, and PCR products.
5. Digestion for longer than 3 h is not recommended, as prolonged incubation may lead to star activity.

Prepare Reaction Mix

Prepare the reaction mix on ice as follows:

Components	Volume per Reaction	Concentration in Master Mix
10× Cut-Buffer	5 μL	1×
EcoR I (20 U/μL)	1 μL	0.4 U/μL
DNA Substrate	1 μg	—
ddH ₂ O	To 50 μL	—

Reaction Programme

Incubate at 37°C for 1 h. Heat inactivation: incubate at 65°C for 20 min.