

Product Description

Aci I is a Type IIP restriction endonuclease expressed in *Escherichia coli* carrying the Aci I gene cloned from *Arthrobacter citreus* (C. Polisson). Its recognition and cleavage sequences are shown below:

5'...C ↓ CGC...3'

3'...GGC ↑ G...5'

Components

Component	BR1G102-01 100 U	BR1G102-02 200 U	BR1G102-03 1,000 U
Aci I (10 U/μL)	1 × 0.01 mL	1 × 0.02 mL	1 × 0.1 mL
10× Cut-Buffer	1 × 1 mL	1 × 1 mL	1 × 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:

Component	Volume per Reaction	Concentration in Master Mix
10× Cut-Buffer	5 μL	1×
Aci I (10 U/μL)	1 μL	0.2 U/μL
DNA Substrate	1 μg	—
ddH ₂ O	To 50 μL	—

Reaction Programe

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