

CcN I

GC[^]GGCCGC
AccuCut™ Restriction Endonuclease

- Cat. No. E-1591 200 Units
E-1592 1000 Units

- Lot No. : 02D121491H8A3

- Supplied with Enzyme

10X AccuCut™ violet Buffer	: 1 mL
330 mM	pH 7.9 Tris-acetate
100 mM	Mg-acetate
660mM	K-acetate
10 mM	DTT
1X Dilution Buffer	: 1 mL
10 mM	pH 7.6 Tris-HCl
50 mM	KCl
0.1 mM	EDTA
1 mM	DTT
200 μg/mL	Acetylated BSA
50%	Glycerol

- **Unit definition** : One unit of restriction endonuclease activity is defined as the amount of enzyme required to completely digest 1μg of substrate DNA in a total reaction volume of 50 μL in one hour using the AccuCut™ buffer provided. Incubations are performed in 1.5 mL tubes at the appropriate incubation temperature as indicated in the Product Profile.

- **Isoschizomer** : Not I.

- **Neoschizomer** : Unfound

- **Reactivity on methylated substrate DNA**: Unidentified

- **Ref)** 1.Dedkov, V.S., Rechkunova, N.I., Prihod'ko, E.A., Kileva, E.V., Kusner, Y.S., Verchozina, V.A., Degtyarev, S.Kh., (1995) *Gene*, vol. 157, pp. 99-100. .

- **Source** : *Curtobacterium citreus* N.

- **Concentration** : 6 Units/μL

- **Reaction Condition**

- 10X AccuCut™ violet Buffer
- Incubate at 37 °C.

- **Storage Buffer**

- | | |
|-------|-------------------|
| 20 mM | pH 7.5, Tris-HCl |
| 50 mM | KCl |
| 1 mM | EDTA |
| 10 mM | 2-mercaptoethanol |
| 50% | Glycerol |

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

Quality Control

- **Overdigestion Assay** :

No nonspecific activity was detected after incubation of 1 μg of Ad2 DNA with 50 units of CcN I for 16 hours.

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

- **Nuclease Contamination Assay** :

No altered pattern was detected after incubation of 1 μg of substrate Ad2 DNA with CcN I in 50 μL reaction volume with the supplied AccuCut™ buffer overnight.

- **Ligation and Recutting Assay** :

This assay is used to test for exonuclease activity that would degrade the termini of restriction fragments, resulting in inhibition of ligation and of subsequent digestion of ligated fragments. After 40-fold overdigestion with CcN I, 95% of the DNA fragments can be ligated and recut with CcN I.