

E. coli RuvC Protein

01-011 20 µg 01-012 100 µg

E. coli RuvC protein is a structurally specific endonuclease which binds specifically to the Holliday structure, an intermediate of recombination, at the late stage of homologous recombination and recombination repair and introduces a nick in the symmetrical point of the Holliday junction cleaving and resolving the recombinant (1, 2).

The product is a recombinant protein abundantly expressed by *E. coli* and purified by methods such as chromatography (Fig. 1). Its molecular weight is 19 kD and forms a dimer in liquid and in binding state with the Holliday structure.

Applications

- 1) Studies on homologous recombination mechanism
- 2) To use as endonuclease which functions specifically to the Holliday structure

Specification

Purity: RuvC protein over 90% by SDS-PAGE (CBB staining)

Concentration: 1.0 mg/ml (determined by BCA method)

Form: 50% glycerol, 10 mM Tris-HCl (pH7.5), 2 mM EDTA, 100 mM NaCl, 5 mM mercaptoethanol

Storage: -20°C

Data Link UniProtKB/Swiss-Prot [P0A814](#) (RUVC_ECOLI)

References: This product was used in References 2 and 3.

1. Shinagawa H and Iwasaki H (1996) "Processing the holliday junction in homologous recombination." *Trend Biochem Sci* **21**:107-111 PMID: [8882584](#)
2. Iwasaki H *et al* (1991) "Escherichia coli RuvC protein is an endonuclease that resolves the Holliday structure." *EMBO J* **10**:4381-4389 (1991) PMID: [1661673](#)
3. Murayama Y *et al* (2008) "Formation and branch migration of Holliday junctions mediated by eukaryotic recombinases." *Nature* **451**:1018-1021 PMID: [18256600](#)

Related Products:

[01-007](#) *E.coli* RuvA protein

[01-009](#) *E.coli* RuvB protein

[61-005](#) anti-RuvA antibody, rabbit polyclonal

[61-007](#) anti-RuvB antibody, rabbit polyclonal

[61-009](#) anti-RuvC antibody, rabbit polyclonal

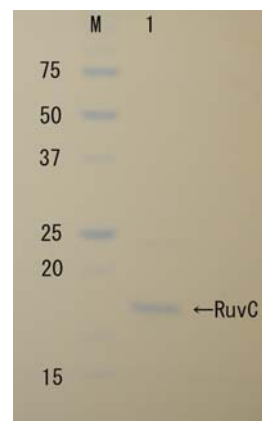


Fig.1 Polyacrylamide gel electrophoresis of RuvC protein.