

Anti-RuvA antibody, rabbit serum

61-005 100 μl

Shipping and Storage: Shipped at 4°C or -20°C and Store at -20°C Immunogen: Purified full-size recombinant RuvA protein (2) Form: Rabbit antiserum added with 0.05% sodium azide

Applications

1) ELISA

2) Western blotting (x 3,000 dilution) (Fig.1)

Other applications have not been tested.

Background: *E. coli* **RuvA** protein binds specifically to the Holliday structure which is the intermediate of recombination at the late stage of homologous recombination and recombination repair, and forms a complex with RuvB motor protein, allowing the migration of Holliday junction using ATP hydrolysis energy and expands the heteroduplex region. In solution, it forms a tetramer and binds to the cross-like DNA of the Holliday junction from below and above, holding it in between (1, 2).

Using this antiserum in Western blotting, the band of 22kD corresponding to **RuvA** was obtained from the extract of *E. coli* cells (Fig.1).

DataLink UniProtKB/Swiss-Prot POA809 (RUVA_ECOLI)

References

- 1. Shinagawa H and Iwasaki H (1996) "Processing the holliday junction in homologous recombination" *Trends Biochem Sci* **21**:107-111PMID: 8882584
- Iwasaki H *et al* (1992) "Escherichia coli RuvA and RuvB proteins specifically interact with Holliday junctions and promote branch migration" *Genes Dev* 6:2214-2220 PMID: <u>1427081</u>

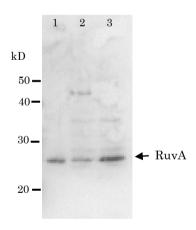


Fig1. Detection of RuvA (22kD) protein by
Western blotting using this antibody.
lane1: RuvA protein 0.8ng
lane2: <i>E. coli</i> AB1157 crude extract
lane3: <i>E. coli</i> AB1157 <i>lexA</i> mutant crude extract
Expression of RuvA is enhanced by lexA mutation.