

Anti-Rhp51(fission yeast) antibody (rabbit serum)

Immuned Animal; Rabbit

Polyclonal antiserum

63-001 50 μ l, 63-002 250 μ l

Rhp51 protein of *Schizosaccharomyces pombe* (fission yeast) is a functional and structural homolog of *E. coli* RecA protein and Rad51 proteins of eukaryotes, which play a major role in genetic recombination and recombination repair by mediating strand exchange reaction between homologous DNA strands (1).

The product was prepared by immunizing rabbit with full-size recombinant Rhp51 protein expressed in *E. coli* and purified.

Using this anti-serum, Rhp51 protein (40 kD) in the crude extract was detected by Western blotting (Fig 1) and Rhp51 foci formation induced by stalled replication (2) and DNA-damage (3) was detected by indirect immunofluorescence. GFP-tagging of Rhp51 protein at either N- or C- terminus inactivates the function of Rhp51, and therefore, it cannot be used for the study of foci formation instead of the antibody. This antibody was successfully used for immunoprecipitation assay (4).

Usage

- 1) Western blotting (x2,000~5,000 dilution)
- 2) Immuno-precipitation
- 3) Detection of foci formation by indirect immunofluorescence

Specification

Form; 0.09 % sodium azide added

Storage: 4 C (long period, -70C)

Reference

1. Lehmann AR, Mutation Res. 363, 147 (1996) Review
2. Lambert S, et al., Cell 121, 689 (2005)
3. Morishita T, et al., Mol. Cell. Biol. 25, 8074 (2005)
4. Haruta N. et al, Nat. Struc. Mol. Biol. 13, 823(2006)

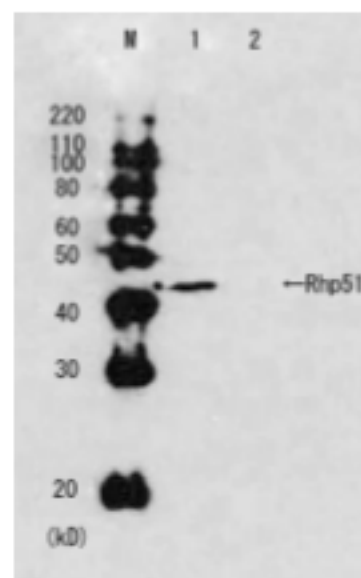


Fig. 1 Western blot analysis of Rhp51 in whole cell extracts.

M: Molecular weight markers (kD)

Lane 1, Wild-type strain. Lane 2, rhp51 deletion strain.