

## anti-Rad51(*S. cerevisiae*) antibody ,rabbit serum

62-101    50 µl                      62-102            250 µl

*S. cerevisiae* Rad 51 protein is a functional and structural homolog of *E. coli* RecA and human Rad51 proteins and plays a central role in DNA homologous recombination and recombination repair by promoting homologous DNA strand exchange reaction. Dmcl, Rad55, Rad57 are paralogs of Rad51 and they form complex with Rad51 and Rad52 in mediating recombination processes (1, 2) .

The product was prepared by immunizing rabbit with the full size recombinant *S. cerevisiae* Rad 51 protein expressed in *E. coli* and purified. Using this anti-serum, Rad 51 protein of 43 kD was detected by Western blotting in the wild type cell extract but not detected in rad51 deletion strain extract (Fig 1).

### Application

- 1) Western blotting (x 2,000~10,000 dilution) (Fig. 1).
- 2) By immuno-precipitation, identification of interacting proteins with Rad51.
- 3) By indirect immunofluorescence, detection of Rad 51 protein expression inside the cells and foci formation on DNA damaged parts on chromosomes.

### Specification

Form: 0.09 % sodium azide added serum

Reaction: *S. cerevisiae* Rad 51 protein

Storage: 4°C (long period -70°C)

### Literature:

1. Freidberg EC, et al. DNA Repair and Mutagenesis 2nd ed., ASM Press
2. Shinohara A. et al. Cell, 69:457(1992)

Fig. 1. Western blotting of the crude cell extract of wild-type strain (left lane) and rad51 deletion mutant (right lane).



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