

Anti-Rad51 (*S. cerevisiae*) antibody, rabbit serum、ChIp grade 62-101 100 ul,

Storage: Ship at 4° C and store at -20° C

Reactivity: S.cervisiae Rad 51 protein. The specificity of reaction was confirmed with rad51 mutant by WB (Fig.1)

Immunogen: Recombinant His-tagged Sc Rad51 protein (full-size)
Applications

- 1) Western blotting (1/1,000~1/3,000 dilution)
- 2) Immunoprecipitation.
- 3) Chromatin Immunoprecipitaiton
- 4) Immunoflorescence staining
- 5) ELISA

Form: Whole antiserum added with 0.09 % sodium azide

Background: S. cerevisiae Rad 51 protein (400 aa, 43 kDa) 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

Data Link SGD RAD51/YER095W

UniProtKB/Swiss-Prot: P25454 RAD51 - Saccharomyces cerevisiae

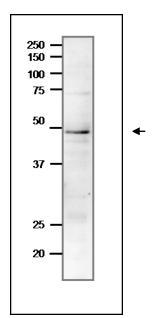


Fig.1 Western blot of endogenous Rad51 protein in crude extract of *S. cerevisiae*.

Proteins in the extract were separated on 12.5% SDS-PAGE and transferred to membrane in wet system overnight. The antibody was used at 1/1,000 dilution. As 2nd antibody, HRP conjugated goat anti-rabbit IgG antibody was used at 1/10,000 dilution.



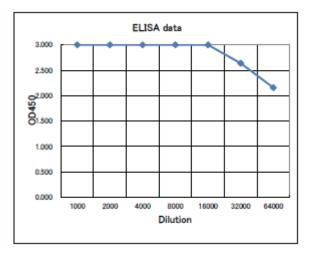


Fig.2 Titration of antibody reactivity of anti-Rad51 antibody by ELISA

Plate was coated with 100 μ g of recombinant Rad51 protein (S. cervisiae) per well and 100 μ l of the antiserum at the indicated dilution was added to each well and incubated. After washing, goat anti-rabbit-IgG conjugated with HRP was added as $2^{\rm nd}$ antibody. Color was developed with TMB as substrate

References: This antibody was used in the following publications.

- 1.Ribeyre C, Shore D. Anticheckpoint pathways at telomeres
 Nat Struct Mol Biol. 2012,2.19: 307-13 PMID 22343724 ChIP (S. cerevisiae)
- 2. Muramoto N et al. Phenotypic diversification by enhanced genome restructuring after induction of multiple DNA double-strand breaks. <u>Nat Commun.</u> 2018 May 18;9(1):1995.PMID:29777105. **IF (S. cerevisiae)**