

Anti-Rad51(human) antibody (affinity purified IgY)

Immuned Animal; Chicken

Polyclonal antibodies, affinity purified IgY

70-009 20 μ g 70-010 50 μ g

Human Rad51 protein is a functional and structural homolog of *E. coli* RecA protein, which plays a major role in genetic recombination and recombination repair by mediating strand exchange reaction between homologous DNA strands

(1). Rad51 functionally and physically interacts with its paralogs, Dmcl1, Rad51B, Rad51C, Rad51D, Xrcc2 and Xrcc3, and also with Rad52 in recombination processes. It also interacts with oncogenes and tumor suppressors such as BRACA1, BRACA2, and P53 for the maintenance of genome stability (1). The product was purified (Fig.1) from the eggs of immunized chicken with full-size recombinant Rap51 protein expressed in *E. coli* and affinity purified. Affinity purification increased antibody titer 30-fold.

Using this anti-serum, Rad51 protein (37 kD) in the crude extract was detected by Western blotting (Fig 2) at 40 kD position and Rad51 foci formation induced by stalled replication and DNA-damage (2) was detected by indirect immunofluorescence. This antibody was successfully used for immunoprecipitation, western blot and foci detection.

Applications

- 1) Western and dot blotting (10000~50000 fold dilution)
- 2) Immuno-precipitation.
- 3) Detection of foci formation by indirect immunofluorescence

Specification

React with: Mammalian (human and mouse) and chicken Rad51

Form: 0.4 mg/ml in 100 mM NaCl, 20 mM Tris/HCl (pH 7.0), 50% Glycerol

Storage: -70 C

Reference

1. Friedberg EC, et al. DNA Repair and Mutagenesis 2nd ed., ASM Press
2. Tashiro S, et al., Rad51 accumulation at sites of DNA damage and in postreplicative chromatin. *J Cell Biol* 150; 283-291 (2000)

Fig.1. SDS-PAGE (without Et-SH) analysis of purified IgY

Fig. 2 Western blot analysis of Rap51 in HeLa cell extract.

Fig.1

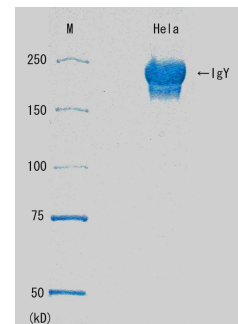
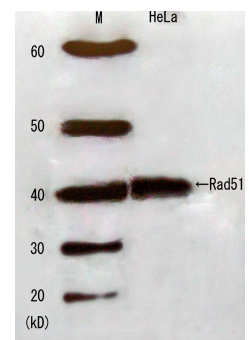


Fig.2



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