Anti-Rad51(human) antibody (chicken serum)

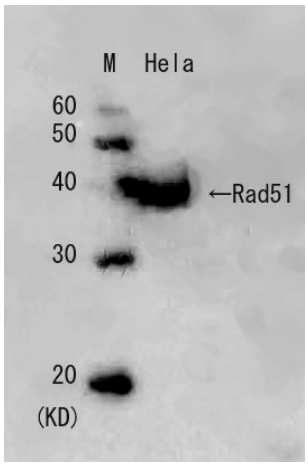
Immuned Animal; Chicken

Polyclonal antiserum

70-003　50 μl　　70-004　250 μl

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 Dmc1, 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 prepared by immunizing chicken with full-size recombinant Rap51 protein expressed in E. coli and purified.

Using this anti-serum, Rad51 protein (37 kD) in the crude extract was detected by Western blotting (Fig 1) at 40 kD position and Rad51 foci formation induced by stalled replication and DNA-damage (2) was detected by indirect immunofluorescence. GFP-tagging of Rad51 protein at either N- or C- terminus inactivates the function of Rad51, and therefore, it cannot be used for the study of foci formation instead of the antibody. This antibody was successfully used for immunoprecipitatio assay .



Usage

1) Western blotting (2000~7000 fold dilution)

2) Immuno-precipitation

3) Detection of foci formation by indirect immunofluorescence

Specification

React with: human and mouse Rad51

Form; 0.09 % sodium azide added

Storage: 4 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 Western blot analysis of Rap51 in HeLa　cell extract.

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