![Bio Academia logo]

Anti-Rhp55 (*rad homolog pombe 55*) antibody, rabbit serum

63-005   50 µl

Shipping and Storage: Shipped at 4℃ or -20℃ and store at -20℃ for long period.

Immunogen: Recombinant His6-tagged Rhp55 protein expressed in *E.coli*.

Form: rabbit antiserum

Reactivity: Rhp55p (*S. pombe*)

Applications:

1.Western blotting: x1/1000 (Fig.1)

Background: Rhp55 protein is encoded by *rhp55*⁺ from *S. pombe* with homology to RecA and showed highest similarity to *S. cerevisiae* Rad55p. Rhp55p acts in one DSB repair pathway with Rhp51 and Rhp54 proteins. Rhp55p is important for recombinational DNA repair of exogenously induced DNA damage by MMS, UV, and IR. Moreover, Rhp55p is required for genomic stability, efficient sporulation, and full meiotic recombination in fission yeast. *S. pombe rhp57*⁺ is also a homolog of *S. cerevisiae RAD57* and encodes a protein with structural similarity to RecA. Rhp55 and Rhp57 proteins strongly interact *in vivo*, form a complex equivalent to the *S. cerevisiae* Rad55p-Rad57p heterodimer, which functions as a mediator, aiding in the early step of HR by helping to stabilize Rad51 loading onto single-stranded DNA.

Data Link: UniProtKB – O14129 (Rad55_SCHPO)

Reference: Anti-Rhp55 was described in the following article.

Tsutsui Y *et al*. Multiple interactions among the components of the recombinational DNA repair system in *Schizosaccharomyces pombe*. Genetics. 159(1):91-105 (2001)
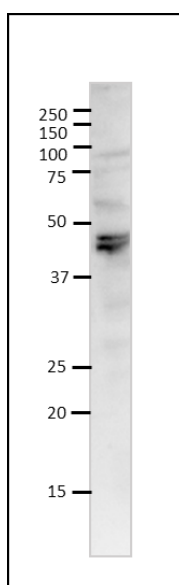

Fig.1 Western blot of MP111 (*S.pombe*) whole cell lysate

20 µg of MP111 whole cell lysate was run on SDS-PAGE (12.5 % gel). Anti-Rhp55 antibody was used at 1/1000 dilutions. Second antibody (goat anti-rabbit IgG antibody, HRP-conjugated, ab205718(Abcam) was used at 1/10,000 dilution.