

Anti-Cut5/Rad4 (*S. pombe*) antibody, rabbit serum

63-107 100 µl

Shipping and Storage: Shipped at 4°C or -20°C and store at -20°C.

Immunogen: Recombinant GST-fusion protein with the N-terminal half of Cut5 protein

Form: Rabbit antiserum added with 0.05 % sodium azide

Reactivity: Reacts with *S. pombe* Cut5/Rad4 protein. Not tested for other species

Applications

1. Western blotting (500 fold dilution)

Not tested for other applications

Background: Cut5/Rad4/Dre3 protein is an essential component for DNA replication and also for the damage and checkpoint control which couples S and M phases (1, 2). It interacts with chromatin proteins to form the complex required for the initiation and progression of DNA synthesis. It contains 4 BRCT domains and the molecular mass is 74.1 kDa with 648 amino acids.

Data Link UniProtKB/Swiss-Prot [P32372](#) (RAD4_SCHPO)

References: This antibody was used in the following references.

1. Saka Y *et al* "Damage and replication checkpoint control in fission yeast is ensured by interactions of Crb2, a protein with BRCT motif, with Cut5 and Chk1" *Genes Dev* **11**:3387-3400 (1997) PMID: [9407031](#)
2. Saka Y *et al* "Fission yeast cut5 links nuclear chromatin and M phase regulator in the replication checkpoint control" *EMBO J* **13**:5319-5329 (1994) PMID: [7957098](#)

Figure Identification of the Cut5/Rad4 protein in the crude extract of *S. pombe* with this antibody.

Samples were prepared by alkali-lysis of the cells followed by TCA precipitation of proteins.

Lane M: Size markers (kDa)

Lane 1: Wild-type cells

Lane 2: The cut5-5Flag gene replacing the wild-type cut5 gene

Lane 3: The cut5-13myc gene replacing the wild type gene

Lane 4: The cut-TAP gene replacing the wild-type gene

* Cut5 protein is known to be sensitive for protease digestion in the C-terminal region. The native and the degradation products are observed as described in Ref.2

