



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

63-107 100 µl

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

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Applications

1. Western blot 500 fold dilution Not tested for other applications

Specification

Immunogen: Recombinant GST-fusion protein with the N-terminal half of Cut5 protein Specificity: Reacts with *S. pombe* Cut5/Rad4 protein. Not tested for other species

Form: Rabbit antiserum with 0.05 % sodium azide Storage: -20°C and long term storage -70°C

Data Link

UniProtKB/Swiss-Prot P32372 (RAD4_SCHPO)

References This antibody was used in the following references.

- 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: <u>7957098</u>

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

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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

