



Anti-Dis2 (S. pombe) antibody (D2F), rabbit serum

63-119 100 µl

Schizosaccharomyces pombe Dis2 is a serine/threonine protein phosphatase which is highly similar to mammalian type 1 phosphatase (PP1). Protein phosphatases are known to play critical roles in cell cycle regulation in fission yeast. Fission yeast has two type 1 protein phosphatases, Dis 2 and Sds21. They are 37 kDa proteins and their amino acid sequences are 80% identical to each other and to mammalian PP1 homologs. Dis 2 and Sds21 are necessary for mitotic chromosome disjunction and have overlapping functions. Their disruptants are lethal only when both genes are disrupted. Dis 2 is known to be enriched in nuclei.

Applications

1. Immunoblot (dilution: 1/300~1/1000)

2. Immunoprecipitation

Specification

Immunogen: Recombinant *S. pombe* full-length Dis2 (Ref. 1) Specificity: Specific to Dis2 and does not cross-react with Sds21

Form: Rabbit antiserum with 0.05 % sodium azide Storage: Shipped at 4°C and long term storage -20°C

Data Link:

Swiss-Prot P13681

References: This antibody has been used in Ref. 1, 2 and 3.

- 1. Stone EM *et al.* "Mitotic regulation of protein phosphatases by the fission yeast sds22 protein." *Curr Biol* **3**: 13-26 (1993) PMID: <u>15335873</u>
- 2. Yamano H *et al.* "Phosphorylation of dis2 protein phosphatase at the C-terminal cdc2 consensus and its potential role in cell cycle regulation." *EMBO J.* 13:5310-5318 (1994) PMID: <u>7957097</u>
- 3. Ishii K *et al.* "Requirement for PP1 phosphatase and 20S cyclosome/APC for the onset of anaphase is lessened by the dosage increase of a novel gene *sds23**." *EMBO J.* 15:6629-6640 (1996) PMID: 8978689

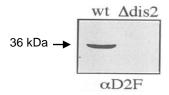


Fig.1 Immunoblot of wild-type and dis2 *S. pombe* cells using anti-dis2 antibody, D2F (ref.3).

wt: wild type

dis2: dis2 deletion mutant

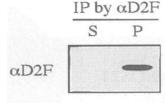


Fig. 2 Immunoprecipitation of wild-type *S. pombe* extracts was performed using anti-dis2 antibody, D2F (ref.3).

Resulting immunoblot immunoprecipitate (P) and supernatant (S) used anti-dis2 antibody.