

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.

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

2. Immunoprecipitation

Immunogen: Recombinant S. pombe full-length Dis2 (Ref. 1)

Specificity: Specific to Dis2 and does not cross-react with Sds21

Form: Rabbit antiserum added with 0.05 % sodium azide

Storage: Shipped at 4°C and stored at -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: 15335873
- 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: 7957097
- 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

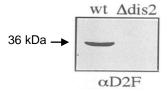
Fig.1 Immunoblot of wild-type and $\Delta dis2$ *S.pombe* cells using anti-dis2 antibody, $\alpha D2F$ (ref.3).

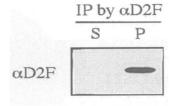
wt: wild type

Δdis2: dis2 deletion mutant

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

Resulting immunoprecipitate (P) and supernatant (S) were immunoblotted by anti-dis2 antibody.





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