

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

63-119 100 µl

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

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

Form: Rabbit antiserum added with 0.05 % sodium azide

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

Applications

1. Western blotting (dilution: 1/300~1/1000)
2. Immunoprecipitation

Background: *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.

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](#) **WB (S. pombe)**
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](#) **WB**
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](#). **WB, IP (S. pombe)**
4. Swaffer MP *et al.* CDK Substrate Phosphorylation and Ordering the Cell Cycle. *Cell.* 2016 Dec 15;167(7):1750-1761. PMID: [27984725](#) **WB (S. pombe)**

Fig.1 Immunoblot of wild-type and Δ dis2 *S.pombe* cells using anti-dis2 antibody, α D2F

wt: wild type

Δ dis2: dis2 deletion mutant

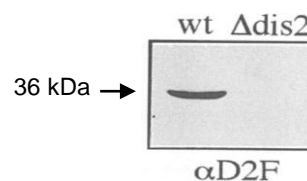


Fig.2 Immunoprecipitation of wild-type *S. pombe* extracts was performed using anti-dis2 antibody, D2F.

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

