

Anti-Dis2 p-T316 (S. pombe) antibody, rabbit serum

63-121 50 μl

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

Immunogen: Synthetic peptide NWHMT(PO3)PPRKN conjugated to KLF

Form: Rabbit antiserum added with 0.05 % sodium azide

Reactivity: Reacts with *S. pombe* Dis2 protein phosphorylated at Thr316.

Applications

Western blotting (1/1,000~1/2,000 dilution). Not tested for other applications

Background: *S. pombe* dis2 gene encodes Serine/threonine-protein phosphatase PP1-1 (327 aa, 37.6 kDa) which plays essential role in cell cycle control and required for exit from mitosis. Dis2 protein is phosphorylated at Thr 316 only at mitosis

Key words: Phoshoprotein phosphatase, DNA damage checkpoint, microtubule cytoskeleton organization, rRNA processing, signal transduction, signal transduction, mitotic cell cycle, homologous chromosome segregation

Database Links: <u>UniProt/Swiss-Prot P13681</u> <u>PomBase SPBC776.02c</u>

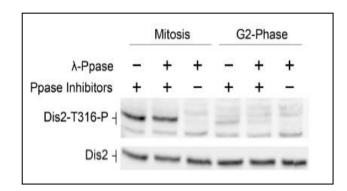


Figure. Identification of Dis2 phosphorylated at T316 by western blotting.

S. pombe crude extracts prepared from mitotic and G2-phase were analysed by WB. Dis2 and phosphorylated Dis2 were detected with anti-Dis2 antibody (BA 63-119) and this antibody, respectively. Phosphorylation is increased in mitosis and sensitive to λ-phosphatase. The antibody was used at 1/1,000 dilution in PBS containing 0.1% Tween and 1% milk. Courtesy of Dr M. Swaffer at Cancer Research UK

References: This antibody was described in Ref.1 and used in the following publications



- 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.
 1996. 15: 6629-40. PubMed 8978689 WB
- 2. Sutani T. et al Fission yeast condensin complex: essential roles of non-SMC subunits for condensation and Cdc2 phosphorylation of Cut3/SMC4. Genes Dev. 1999. 13: 2271-83. PubMed 10485849 WB
- 3. Swaffer MP et al. CDK Substrate Phosphorylation and Ordering the Cell Cycle. Cell. 2016 Dec 15;167(7):1750-1761 PMID: 27984725 WB

Related Product: 63-119 anti-Dis2 antibody