

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

63-121 50 μ l

Shipping and Storage: Shipp at 4°C and upon arrival, centrifuge briefly, aliquot and store at -20°C .

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

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

Applications

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

Form: Rabbit antiserum added with 0.05 % sodium azide

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

Database Links: [UniProt/Swiss-Prot P13681](http://www.uniprot.org/Swiss-Prot/P13681) [PomBase SPBC776.02c](http://www.pombase.org/SPBC776.02c)

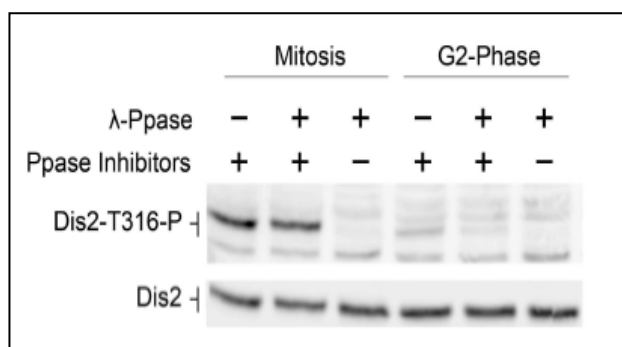


Figure. Identification of Dis2 phosphorylated at T316 by western blotting.

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

1. 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](#)