

Anti-Sds23 (S. pombe) antibody, rabbit serum

63-143 100 μl

Schizosaccharomyces pombe Sds23 protein functions to facilitate the progression in anaphase in mitotic cell cycle. For initiating anaphase in fission yeast, PP1 (protein phosphatase 1) and 20S cyclosome/APC are required. The sds23 gene is a multicopy suppressor for mutations in PP1 and the 20S cyclosome/APC, implying that the gene dosage increase can relieve the requirement for PP1 and the cyclosome/APC for the onset of anaphase. It encodes a 408 aa product and appears to be conserved. The sds23 gene is not essential for cell viability, but in the sds23 deletion mutant, the progression of anaphase and cytokinesis are retarded and cell shape is aberrant. Therefore Sds23 protein appears to be involved in progression in anaphase as well as in cytokinesis and cell shape control. Sds23 is neither physically bound to PP1 nor a subunit of the cyclosome. It may regulate the PP1 and 20S cyclosome/APC in an unknown fashion.

Applications:

1. Weastern blotting ($\sim 1/500$ dilution) Other applications were not tested

Immunogen: Recombinant S. pombe Sds23 corresponding to amino acids 98-345

Specificity: Reacts with S. pombe Sds23 protein

Form: Rabbit antiserum added with 0.05% sodium azide

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

Data Link: Swiss-Prot Q09826

Reference: This antibody was used in the following reference.

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

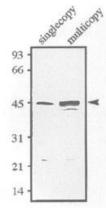


Fig.1 Identification of Sds23 protein.

Extracts of wild-type and wild-type carrying *psds23* were made and immunoblotted using anti-Sds23 antibodies.