

## Anti-Pad1 (S. pombe) antibody, rabbit serum

63-133 100 µl

**Storage**: Shipped at 4°Cor -20°C, and stored at -20°C

Reactivity: S. pombe

Immunogen: Recombinant S. pombe full-length Pad1

## Applications:

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

2. Immunoprecipitation

Form: Rabbit antiserum added with 0.05 % sodium azide

Background: Schizosaccharomyces pombe Pad1, a 35 kDa protein, is a component of the 26S proteasome which is involved in the ATP-dependent degradation of ubiquitinated proteins. Transcription factor Pap1 is controlled by the functional interaction between the positive regulator Pad1 and negative regulator Crm1. Both proteins are essential for cell viability and for the maintenance of chromosome structure. Pad1 is also responsible for resistance to staurosporine, and other drugs such as cycloheximide and caffeine.

Data Link: Swiss-Prot P41878

**References:** This antibody has been used in Ref. 1, 2 and 3.

- 1. Shimanuki M *et al.* "A novel essential fission yeast gene pad1<sup>+</sup> positively regulates pap1<sup>+</sup>-dependent transcription and is implicated in the maintenance of chromosome structure." *J Cell Sci* **108**: 569-579 (1995) PMID: 7769002
- Tatebe H and Yanagida M "Cut8, essential for anaphase, controls localization of 26S proteasome, facilitating destruction of cyclin and Cut2." Curr Biol. 10:1329-1338 (2000)
  PMID: <u>11084332</u>
- 3. Takeda K and Yanagida M "Regulation of nuclear proteasome by Rhp6/Ubc2 through ubiquitination and destruction of the sensor and anchor Cut8." *Cell* 122:393-405 (2005)

PMID: 16096059

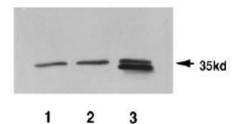


Figure. Identification of Pad1 protein in crude extracts by anti-Pad1 antiserum

Lane 1: Endogeneous Pad1 protein

Lane 2: Pad1 protein expressed in the cells carrying wild-type *pad1* gene on plasmid

Lane 3: Pad1 proteins expressed in the cells carrying both wild type *pad1* gene and truncated *pad1* gene encoding 35 kDa and 33 kDa protein, respectively.