

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.

- Shimanuki M *et al.* "A novel essential fission yeast gene pad1⁺ positively regulates pap1⁺-dependent transcription and is implicated in the maintenance of chromosome structure." *J Cell Sci* 108: 569-579 (1995) PMID: <u>7769002</u>
- 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

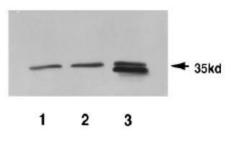


Figure. Identification of Pad1 protein in crude extracts by anti-Pad1 antiserum

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.