

Product code	63-133
Size	100 µl
Storage	Store 4°C for short term For long term storage store at -20°C.
	Aliquot to avoid repeated freezing and thawing.
Concentration	N/A
Buffer	0.05% sodium azide
Purity	Rabbit antiserum
Immunogen	Recombinant <i>S. pombe</i> full-length Pad1
Isotype	Rabbit IgG
Reactivity	S. pombe Pad1 protein.
Special notes	N/A
Application	1. Western blotting (1/300-1/1000)
	2. Immunofluorescence staining
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	UniProtKB <u>P41878</u> (RPN11_SCHPO)
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC	
PROCEDURES. NOT FOR MILITARY USE.	

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



Data Images: 63-133 Anti-Pad1 (S. pombe) antibody, rabbit serum



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.

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>
- 2. 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: <u>16096059</u>