



## Anti-Rpn12 (*S. cerevisiae*) antibody, affinity purified

### BACKGROUND

The 26 S proteasome is a protein complex with a molecular mass of ~2,000 kDa. It is essential not only for eliminating damaged or misfolded proteins but also for degrading short lived regulatory proteins involved in cell cycle regulation, DNA repair, signal transduction, apoptosis, and metabolic regulation (ref.1). The 26S proteasome is composed of the 20S core particle (CP) and the 19S regulatory particle (RP). The RP is further subdivided into lid and base sub-complexes. **Rpn12** is one of the non-ATPase subunits of the lid. **Rpn12** interacts with an ATPase subunit, Rpt1, of the base. **Rpn12**, Rpt1 double mutant becomes lethal, suggesting a strong interaction between **Rpn12** and Rpt1. In the double mutant cells, the function of the 26S proteasome is completely eliminated.

Product type	Primary antibodies
Host	Rabbit
Source	
Form	Liquid
	Affinity purified IgG in PBS, 1 mg/ml BSA, 0.09 % sodium azide, 50% glycerol
Volume	20 µl
Concentration	
Specificity	Rpn12
Antigen	Recombinant yeast Rpn12 expressed in <i>E. coli</i>
Isotype	

**Application notes** WB, IP Other applications have not been tested.

### Recommended use

### Recommended dilutions

Western blotting: 1/5,000~1/10,000

Optimal dilutions/concentrations should be determined by the end user.

**Data Link:** [SGD RPN12/YFR052W](#)

### Staining Pattern

**Cross reactivity** *S. cerevisiae* Rpn12, not tested with other species

**Storage** -20°C

**References** 1) Hershko A and Ciechanover A "THE UBIQUITIN SYSTEM." *Annu. Rev. Biochem.* **67**: 425-479 (1998) PMID: [9759494](#)

2) Takeuchi J and Toh-e A "Genetic evidence for interaction between components of the yeast 26S proteasome: combination of a mutation in RPN12 (a lid component gene) with mutations in RPT1 (an ATPase gene) causes synthetic lethality." *Mol Gen Genet* **262**: 145-153 (1999) PMID: [10503546](#)

3) Tone Y *et al* "Nob1p, a new essential protein, associates with the 26S proteasome of growing *saccharomyces cerevisiae* cells." *Gene* **243**: 37-45 (2000) PMID: [10675611](#)

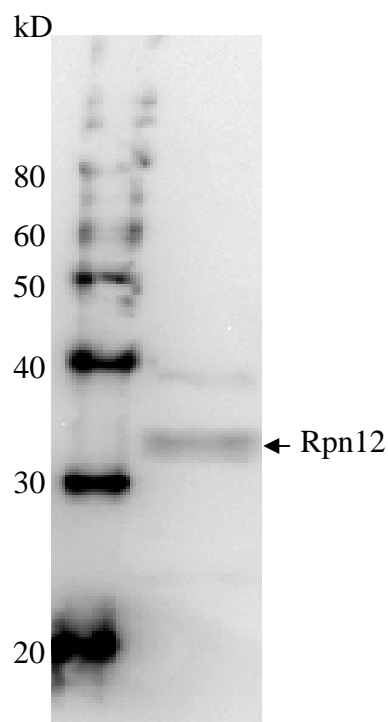


Fig.1 Detection of Rpn12 (32kD) in the crude extract of *S. cerevisiae* by Western blotting using this antibody.

**Related Products**

BAM-62-201-EX	Anti Rpn3
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BAM-62-207-EX	Anti Rpn9
BAM-62-211-EX	Anti Nob1
BAM-62-213-EX	Anti Nas6
BAM-62-215-EX	Anti Tem1

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