anti-Rnq1 (*S. cerevisiae*) antibody, affinity purified

62-301 100 ul

Background: The glutamine- and asparagine-rich protein, **Rnq1,** is a putative yeast prion. **Rnq1** protein with yet unknown function, can exists in either noninfectious soluble monomer form, [*pin*$^-$], or the insoluble aggregated amyloid-like form called [*PIN*$^+$]. The insoluble state is dominant and transmitted between cells through the cytoplasm (1). **Rnq1** protein is necessary for the *de novo* induction of another prion, [*PSI*$^+$] (2). The molecular chaperone Hsp104 is necessary for the aggregate formation of polyglutamine and for the maintenance of prion phenotype. The pre-existing aggregates are required for the chaperon-dependent establishment of the epigenetic trait in yeast prions (3).

Applications

1) Western blotting (x 300 fold dilution). Not tested for other applications.

Product: Rabbit polyclonal antibody affinity purified with the synthetic peptide used as antigen

Immunogen: Synthetic peptide CSQQNNNGNQNRY corresponding to the C-terminus region of Rnq1

Form: Purified IgG in PBS, 1mg/ml BSA, 0.09% sodium azide, 50% glycerol

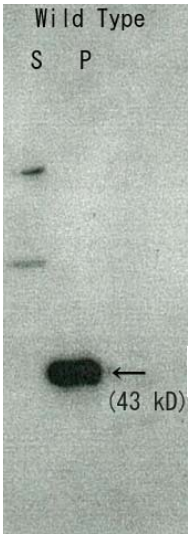
Reactivity: *S. cerevisiae* Rnq1, not tested with other species

Storage: -20℃ (for long period, -70℃)

Data Link SGD RNQ1/YCL028W

References: This antibody is used in ref.3.

1. Sondheimer, N. & Lindquist, S. "Rnq1: an epigenetic modifier of protein function in yeast" *Mol Cell* **5,** 163-172 (2000) PMID: 10678178
2. Derkatch, I.L. *et al.* "Effects of Q/N-rich, polyQ, and non-polyQ amyloids on the de novo formation of the [PSI+] prion in yeast and aggregation of Sup35 in vitro." *Proc. Natl. Acad. Sci. USA.* **101**, 12934-12939 (2004) PMID: 15326312
3. Kimura,Y. *et al.* "The role of pre-existing aggregates in Hsp104-dependent polyglutamine aggregate formation and epigenetic change of yeast prions." *Genes to Cells* **9**, 685-696 (2004) PMID: 15298677



Rnq1 protein

Fig.1. Detection of Rnq1 protein in *S. cerevisiae* by Western blotting with this antibody. Cells were harvested after 24 h of galactose induction. Extracts were centrifuged and soluble (S) and pelleted (P) fractions were assayed by Western blotting using this antibody. Rnq1 protein was detected in pelleted fraction (ref. 3).

Related products: #62-300 anti-Sup35/PSI+ (*S.cerevisiae*) antibody

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