

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 exist 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 (300 fold dilution). Not tested for other applications.

Specifications

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

Immunogen: Synthetic peptide CSQQNNNGNQRY 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°C (long-term storage at -70°C)

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 IL 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)

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).

