



Rio2p (Y-220): sc-98828

BACKGROUND

Rio2p and Rrp10p/Rio1p are shuttling proteins that associate with pre-40S particles in the nucleus and are required for the cytoplasmic maturation of 20S pre-rRNA at site D, leading to mature 40S ribosomal subunits. Numerous nonribosomal *trans*-acting factors involved in pre-rRNA processing have been characterized. During the transition from 90S to 40S particles, the majority of non-ribosomal proteins (approximately 30 species) dissociate, and significantly fewer factors associate with 40S pre-ribosomes. Rio2p appears to be localized predominantly in the nucleus. Most pre-40S specific factors are correctly associated with the intermediate particles accumulating in the nucleus upon Rps15p depletion, except the late-binding proteins Tsr1p and Rio2p.

REFERENCES

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2. Angermayr, M., Roidl, A. and Bandlow, W. 2002. Yeast Rio1p is the founding member of a novel subfamily of protein serine kinases involved in the control of cell cycle progression. *Mol. Microbiol.* 44: 309-324.
3. Geerlings, T.H., Faber, A.W., Bister, M.D., Vos, J.C. and Raué, H.A. 2003. Rio2p, an evolutionarily conserved, low abundant protein kinase essential for processing of 20S pre-rRNA in *Saccharomyces cerevisiae*. *J. Biol. Chem.* 278: 22537-22545.
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5. Vanrobays, E., Gelugne, J.P., Gleizes, P.E. and Caizergues-Ferrer, M. 2003. Late cytoplasmic maturation of the small ribosomal subunit requires Rio proteins in *Saccharomyces cerevisiae*. *Mol. Cell. Biol.* 23: 2083-2095.
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SOURCE

Rio2p (Y-220) is a rabbit polyclonal antibody raised against amino acids 133-350 mapping within an internal region of Rio2p of *Saccharomyces cerevisiae* origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Rio2p (Y-220) is recommended for detection of Rio2p of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.