SANTA CRUZ BIOTECHNOLOGY, INC.

Srb10 (yN-19): sc-8946

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cell cycle progression is controlled at a point late in G1 designated Start. Passage through Start requires the activity of the cyclin-dependent protein kinase Cdc28. Transition from G1 to S phase requires the association of Cdc28 with members of the G1 cyclin family, including Cln1, Cln2 and Cln3 (also designated Daf1 or WH11). Srb10 and Kin28 are members of the Cdc28 family of cyclin dependent kinases and are required for cell proliferation. The G2 to M phase transition requires the M phase cyclins, Clb1 (also designated Scb1) and Clb2, as well as the G2 cyclins, Clb3 and Clb4. The S phase cyclins, Clb5 and Clb6, coordinate DNA replication with cytokinesis. Ime2 is a meiosis specific protein kinase that is required for the initiation of meiosis and spore formation.

REFERENCES

1. Nasmyth, K. 1993. Control of the yeast cell cycle by the Cdc28 protein kinase. Curr. Opinion Cell Biol. 5: 166-179.
2. Sherlock, G. and Rosamond, J. 1993. Starting to cycle: G1 controls regulating cell division in budding yeast. J. Gen. Microbiol. 139: 2531-2541.
3. Amon, A., Tyers, M., Futcher, B., and Nasmyth, K. 1993. Mechanisms that help the yeast cell cycle clock tick: G2 cyclins transcriptionally activate G2 cyclins and repress G1 cyclins. Cell 74: 993-1007.
4. Basco, R.D., Segal, M.D., and Reed., S.I. 1995. Negative regulation of G1 and G2 by S-phase cyclins of *Saccharomyces cerevisiae*. Mol. Cell. Biol. 15: 5030-5042.
5. Foiani, M., Nadjar-Boger, E., Capone, R., Sagee, S., Hashimshoni, T., and Kassir, Y. 1996. A meiosis-specific protein kinase, Ime2, is required for the correct timing of DNA replication and for spore formation in yeast meiosis. Mol. Gen. Genet. 253: 278-288.
6. Levine, K., Huang, K., and Cross, F.R. 1996. *Saccharomyces cerevisiae* G1 cyclins differ in their intrinsic functional specificities. Mol. Cell. Biol. 16: 6794-6803.
7. Hengartner, C.J., Myer, V.E., Liao, S.M., Wilson, C.J., Koh, S.S., and Young, R.A. 1998. Temporal regulation of RNA polymerase II by Srb10 and Kin28 cyclin-dependent kinases. Mol. Cell 2: 43-53.

SOURCE

Srb10 (yN-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Srb10 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.

Blocking peptide available for competition studies, sc-8946 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Srb10 (yN-19) is recommended for detection of Srb10 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) 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 donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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.

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.