Srb4 (yN-16): sc-8954



The Power to Question

BACKGROUND

Commitment to cell division occurs at a point late in the G1 phase of the cell cycle, termed Start. Passage through Start requires the activation of the Cdc28 protein kinase by the cell cycle-regulated G1 cyclins. Maximal expression of these G1 cyclins is induced by the heterodimeric transcription factor complex composed of Swi4 (also designated Art1) and Swi6. SWI4 is the DNA-binding subunit of this complex. In addition to binding Swi4, Swi6 forms a complex with Mbp1. This complex activates S-phase cyclins and genes involved in DNA synthesis Rpb1 is the largest subunit of the yeast RNA polymerase II. Srb4 is a basal transcription factor that is essential for the establishment of the transcription initiation apparatus.

REFERENCES

- Koch, T., Moll, T., Neuberg, M., Ahorn, H., and Nasmyth, K. 1993. A role for the transcription factors Mbp1 and Swi4 in progression from G1 to S phase. Science 261: 1551-1557.
- Koch, C., Schlieffer, A., Ammerer, G., and Nasmyth, K. 1996. Switching transcription on and off during the yeast cell cycle: Cln/Cdc28 kinases activate bound transcription factor Sbf (Swi4/Swi6) at start, whereas Clb/Cdc28 kinases displace it from the promoter in G2. Genes and Dev. 10: 129-141.
- Siegmund, R.F. and Nasmyth, K.A. 1996. The Saccharomyces cerevisiae Start-specific transcription factor Swi4 interacts through the ankyrin repeats with the mitotic Clb2/Cdc28 kinase and through its conserved carboxy terminus with Swi6. Mol. Cell. Biol. 16: 2647-2655.
- Harrington, L.A. and Andrews, B.J. 1996. Binding to the yeast Swi4,6dependent cell cycle box, CACGAAA, is cell cycle regulated *in vivo*. Nucl. Acids Res. 24: 558-565.
- Holstege, F.C., Jennings, E.G., Wyrick, J.J., Lee, T.I., Hengartner, C.J., Green, M.R., Golub, T.R., Lander, E.S., and Young, R.A. 1998. Dissecting the regulatory circuitry of a eukaryotic genome. Cell 95: 717-728.

SOURCE

Srb4 (yN-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Srb4 of *Saccharomyces cerevisiae* origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-8954 P, (100 μ g 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.

RESEARCH USE

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

APPLICATIONS

Srb4 (yN-16) is recommended for detection of Srb4 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.

PROTOCOLS

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

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com