



Sub2 (yN-16): sc-26723

BACKGROUND

Nuclear mRNA metabolism relies on the interplay between transcription, processing, and nuclear export. RNA polymerase II transcripts experience major rearrangements within the nucleus, which include alterations in the structure of the mRNA precursors as well as the addition and perhaps even removal of proteins prior to transport across the nuclear membrane. Such mRNP-remodeling steps are thought to require the activity of RNA helicases/ATPases. One such protein, Sub2, is involved in both early and late steps of spliceosome assembly. SUB2 is a DEAD box ATPase/RNA helicase that functions in mRNA export in addition to its role in pre-mRNA splicing. Sub2, through its interaction with Yra1, is required for nuclear mRNA export. Sub2 is a highly conserved *Saccharomyces cerevisiae* homolog of human hUAP56.

REFERENCES

1. Jensen, T.H., Boulay, J., Rosbash, M. and Libri, D. 2001. The DEAD box putative ATPase Sub2p is an early mRNA export factor. *Curr. Biol.* 11: 1711-1715.
2. Strasser, K. and Hurt, E. 2001. Splicing factor Sub2p is required for nuclear mRNA export through its interaction with Yra1p. *Nature* 413: 648-652.
3. Zhang, M. and Green, M.R. 2001. Identification and characterization of yJAP/Sub2p, a yeast homolog of the essential human pre-mRNA splicing factor hUAP56. *Genes Dev.* 15: 30-35.
4. Zenklusen, D., Vinciguerra, P., Wyss, J.C. and Stutz, F. 2002. Stable mRNP formation and export require cotranscriptional recruitment of the mRNA export factors Yra1p and Sub2p by Hpr1p. *Mol. Cell. Biol.* 22: 8241-8253.
5. Merker, R.J. and Klein, H.L. 2002. Role of transcription in plasmid maintenance in the Hpr1 δ mutant of *Saccharomyces cerevisiae*. *Mol. Cell. Biol.* 22: 8763-8773.

SOURCE

Sub2 (yN-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Sub2 of *Saccharomyces cerevisiae* origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-26723 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.

PROTOCOLS

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

APPLICATIONS

Sub2 (yN-16) is recommended for detection of Sub2 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.