SANTA CRUZ BIOTECHNOLOGY, INC.

Leo1 (yD-20): sc-26323

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The Power to Question

BACKGROUND

Leo1 is a member of the RNA polymerase II-associated Paf1 complex, which is involved in transcription elongation in *S. Cerevisiae*, and acts in the same pathway as the Pkc1-mitogen-activated protein kinase cascade. The Paf1 complex physically associates with other transcription elongation factor complexes including Spt16/Pob3 and Spt4/Spt5 and plays an important role in an essential regulatory pathway controlled by cell cycle transcription factors SBF (Swi4/Swi6) and MBF (Mbp1/Swi6). Defects in the Paf1 complex cause sensitivity to 6-azauracil and diminish PUR5 (IMP dehydrogenase) induction, properties that are both implicated in impairment of transcription elongation. Deletion of Leo1 by itself leads to few obvious phenotypes. However, in combination with a Paf1 deletion, deletion of Leo1 suppresses several phenotypes which result from a defective Paf1 complex and a block in transcription, further indicating the involvement of Leo1 in the complex.

REFERENCES

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2. Krogan, N.J., Kim, M., Ahn, S.H., Zhong, G., Kobor, M.S., Cagney, G., Emili, A., Shilatifard, A., Buratowski, S. and Greenblatt, J.F. 2002. RNA polymerase II elongation factors of *S. Cerevisiae:* a targeted proteomics approach. Mol. Cell Biol. 22: 6979-92.
3. Porter, S.E., Washburn, T.M., Chang, M. and Jaehning, J.A. 2002. The yeast Paf1-RNA polymerase II complex is required for full expression of a subset of cell cycle-regulated genes. Eukaryot. Cell. 1: 830-42.
4. Mueller, C.L. and Jaehning, J.A. 2002. Ctr9, Rtf1, and Leo1 are components of the Paf1/RNA polymerase II complex. Mol. Cell Biol 22: 1971-80.
5. Betz, J.L., Chang, M., Washburn, T.M., Porter, S.E., Mueller, C.L. and Jaehning, J.A. 2002. Phenotypic analysis of Paf1/RNA polymerase II complex mutations reveals connections to cell cycle regulation, protein synthesis and lipid and nucleic acid metabolism. Mol. Genetics Genomics 268: 272-85.

SOURCE

Leo1 (yD-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Leo1 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-26323 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

Leo1 (yD-20) is recommended for detection of Leo1 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.