SANTA CRUZ BIOTECHNOLOGY, INC.

Ctr9 (yA-18): sc-26314

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The Power to Question

BACKGROUND

The Paf1 complex is required for full expression of a subset of genes in *S. Cerevisiae,* particularly those responsive to signals from the Pkc1/MAP kinase cascade. Ctr9, a member of the Paf1 complex, is a nuclear protein involved in transcription elongation. Ctr9 contains several TPRs (tetratrico peptide repeats) that are implicated in protein-protein interactions. Within the Paf1 complex, Ctr9 associates with Cdc73 and Paf1, which are both RNA polymerase II-associated proteins. Ctr9 mutants are inviable at higher temperatures and accumulate large cells, features which are due to their inability to activate transcription of G_1 cyclins when entering the cell cycle in budding yeast. The Paf1 complex associates with elongating RNA polymerase II and methylates histone H3 at lysines 4 and 79, activities which link transcription elongation to chromatin methylation.

REFERENCES

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5. Mueller, C.L., Jaehning, J.A. 2002. Ctr9, Rtf1, and Leo1 are components of the Paf1/RNA polymerase II complex. Mol. Cell. Biol. 22: 1971-1980.
6. Krogan, N.J., Dover, J., Wood, A., Schneider, J., Heidt, J., Boateng, M.A., Dean, K., Ryan, O.W., Golshani, A., Johnston, M., Greenblatt, J.F., Shilatifard, A. 2003. The Paf1 complex is required for histone H3 methylation by COMPASS and Dot1p. linking transcriptional elongation to histone methylation. Mol. Cell 11: 721-729.

SOURCE

Ctr9 (yA-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Ctr9 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-26314 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

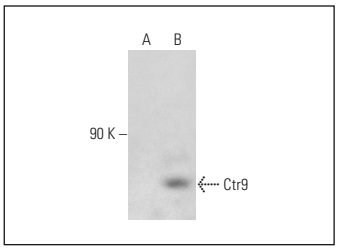
Ctr9 (yN-18) is recommended for detection of Ctr9 of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Ctr9: 125 kDa.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Ctr9 (yA-18): sc-26314. Western blot analysis of Ctr9 expression in non-transfected: sc-117752 (**A**) and mouse CTR9 transfected: sc-126678 (**B**) 293T whole cell lysates.

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.

PROTOCOLS

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