# SANTA CRUZ BIOTECHNOLOGY, INC.

# Swi5 (yY-19): sc-15544



# BACKGROUND

Expression of the yeast HO gene in late  $G_1$  of the cell cycle requires the SWI/SNF chromatin remodeling complex, the Gcn5 histone acetyltransferase, and two different sequence-specific transcriptional activators, Swi5 and Swi4/Swi6. Swi5 is a cell cycle-regulated transcription factors that activates expression of early  $G_1$ -specific genes in *Saccharomyces cerevisiae* and regulates the expression of several target genes involved in mating type switching, exit from mitosis and cell wall function. Swi5 has zinc finger DNA-binding domains that are highly conserved. Swi5 activates the HO gene expression *in vivo*, is a member of the CLB2 cluster, and regulates the transcription of the SIC1 Cdk inhibitor in late mitosis.

# REFERENCES

- Aerne, B.L., Johnson, A.L., Toyn, J.H. and Johnston, L.H. 1998. Swi5 controls a novel wave of cyclin synthesis in late mitosis. Mol. Biol. Cell 9: 945-956.
- Krebs, J.E., Kuo, M.H., Allis, C.D. and Peterson, C.L. 1999. Cell cycleregulated histone acetylation required for expression of the yeast HO gene. Genes Dev. 13: 1412-1421.
- McBride, H.J., Yu, Y. and Stillman, D.J. 1999. Distinct regions of the Swi5 and Ace2 transcription factors are required for specific gene activation. J. Biol. Chem. 274: 21029-21036.
- Visintin, R., Hwang, E.S. and Amon, A. 1999. Cfi1 prevents premature exit from mitosis by anchoring Cdc14 phosphatase in the nucleolus. Nature 398: 818-823.
- Zhu, G., Spellman, P.T., Volpe, T., Brown, P.O., Botstein, D., Davis, T.N. and Futcher, B. 2000. Two yeast forkhead genes regulate the cell cycle and pseudohyphal growth. Nature 406: 90-94.
- Doolin, M.T., Johnson, A.L., Johnston, L.H. and Butler, G. 2001. Overlapping and distinct roles of the duplicated yeast transcription factors Ace2p and Swi5p. Mol. Microbiol. 40: 422-432.

## SOURCE

Swi5 (yY-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Swi5 of *Saccharomyces cerevisiae* origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-15544 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 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

Swi5 (yY-19) is recommended for detection of Swi5 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<sup>™</sup> compatible donkey antigoat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2033 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.