SANTA CRUZ BIOTECHNOLOGY, INC.

SWI5 (M-13): sc-139240

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*. Swi5 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 and Swi5 activates the HO gene expression *in vivo*. Additionally, Swi5 is a member of the CLB2 cluster and regulates the transcription of the SIC1 Cdk inhibitor in late mitosis.

REFERENCES

1. Aerne, B.L., et al. 1998. Swi5 controls a novel wave of cyclin synthesis in late mitosis. Mol. Biol. Cell 9: 945-956.
2. Krebs, J.E., et al. 1999. Cell cycle-regulated histone acetylation required for expression of the yeast HO gene. Genes Dev. 13: 1412-1421.
3. McBride, H.J., et al. 1999. Distinct regions of the Swi5 and Ace2 transcription factors are required for specific gene activation. J. Biol. Chem. 274: 21029-21036.
4. Visintin, R., et al. 1999. Cfi1 prevents premature exit from mitosis by anchoring Cdc14 phosphatase in the nucleolus. Nature 398: 818-823.
5. Doolin, M.T., et al. 2001. Overlapping and distinct roles of the duplicated yeast transcription factors Ace2p and Swi5p. Mol. Microbiol. 40: 422-432.
6. Zhu, G., et al. 2000. Two yeast forkhead genes regulate the cell cycle and pseudohyphal growth. Nature 406: 90-94.

CHROMOSOMAL LOCATION

Genetic locus: Swi5 (mouse) mapping to 2 B.

SOURCE

SWI5 (M-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of SWI5 of mouse origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139240 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.

PROTOCOLS

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

APPLICATIONS

SWI5 (M-13) is recommended for detection of SWI5 of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SWI5 siRNA (m): sc-141948, SWI5 shRNA Plasmid (m): sc-141948-SH and SWI5 shRNA (m) Lentiviral Particles: sc-141948-V.

Molecular Weight of SWI5: 27 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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