



lsw1p (yS-15): sc-30581

BACKGROUND

Transcriptional control involves a complex interplay between gene-specific activators, the general transcription apparatus and chromatin. Organization of genomic DNA into chromatin aids in the regulation of gene expression by limiting access to transcriptional machinery. The SWI/SNF family of complexes, which are conserved from yeast to humans, are ATP-dependent chromatin-remodeling enzymes required for the transcription of a number of genes in yeast. lsw1p is a member of the imitation-switch (ISWI) class of ATP-dependent chromatin remodeling complexes. It is an ATPase whose distinct forms regulate each stage of the transcription cycle. lsw1p forms a complex with loc2p and loc4p to regulate transcription elongation. It also forms a complex with loc3p to repress transcription initiation. lsw1p forms two separable complexes *in vivo* which differ in their abilities to bind to DNA and nucleosomal substrates, which possibly accounts for differences in specific activities in nucleosomal spacing and sliding.

REFERENCES

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2. Tsukiyama, T., et al. 1999. Characterization of the imitation switch sub-family of ATP-dependent chromatin-remodeling factors in *Saccharomyces cerevisiae*. *Genes Dev.*13: 686-97.
3. Kent, N.A., et al. 2001. *In vivo* chromatin remodeling by yeast ISWI homologs lsw1p and lsw2p. *Genes Dev.*15: 619-26.
4. Santos-Rosa, H., et al. 2003. Methylation of histone H3 K4 mediates association of the lsw1p ATPase with chromatin. *Mol. Cell.* 12:1 325-32.
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7. Vary, J.C. Jr, et al. 2003. Yeast lsw1p forms two separable complexes *in vivo*. *Mol. Cell. Biol.* 23: 80-91.
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SOURCE

lsw1p (yS-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of lsw1p 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-30581 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

lsw1p (yS-15) is recommended for detection of lsw1p of *Saccharomyces cerevisiae* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) 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. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.