



Ash1 (yN-17): sc-26681

BACKGROUND

Ash1 (Transcriptional regulatory protein ASH1) is a 588 amino acid protein encoded by the yeast gene ASH1. It is a component of the RPD3C(L) histone deacetylase complex (HDAC) and is responsible for the deacetylation of lysine residues on the N-terminal part of the core histones (H2A, H2B, H3 and H4). Histone deacetylation gives a tag for epigenetic repression and plays an important role in transcriptional regulation, cell cycle progression and developmental events. ASH1 is necessary to repress HO in daughter cells to block mating-type switching through its binding to HO promoter 5'-YTGAT-3' sites. Ash1 is believed to also be involved in pseudohyphal growth. The ASH1 mRNA is transported to the daughter cell before cytokinesis where translation produces the protein to block mating-type switching. The ASH1 mRNA 3'-UTR and the mRNA localization machinery that are essential to restrict accumulation to the bud.

REFERENCES

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3. Long, R.M., Singer, R.H., Meng, X., Gonzalez, I., Nasmyth, K. and Jansen, R.P. 1998. Mating-type switching in yeast controlled by asymmetric localization of ASH1 mRNA. *Science* 277: 383-387.
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5. Chandrapaty, S. and Errede, B. 1998. Ash1, a daughter cell-specific protein, is required for pseudohyphal growth of *Saccharomyces cerevisiae*. *Mol. Cell. Biol.* 18: 2884-2891.
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7. Carrozza, M.J., Florens, L., Swanson, S.K., Shia, W.J., Anderson, S., Yates, J., Washburn, M.P. and Workman, J.L. 2005. Stable incorporation of sequence specific repressors Ash1 and Ume6 into the RPD3L complex. *Biochim. Biophys. Acta* 1731: 77-87.

SOURCE

Ash1 (yN-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Ash1 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-26681 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Ash1 (yN-17) is recommended for detection of Ash1 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).

Molecular Weight of Ash1: 66 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.

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.