SANTA CRUZ BIOTECHNOLOGY, INC.

Amn1 (yK-15): sc-28173

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Mitotic exit requires the activation of the MEN signaling pathway in *S. cerevisiae*, but once separation occurs, in order to reset the cell cycle to G1 this activation must be reversed. Daughter cells produce an antagonist of the pathway, which induces Amn1, a protein involved in the regulation of genes involved in daughter cell separation. Loss of Amn1 function results in defects both in spindle assembly and nuclear orientation checkpoints, causing delayed transition to G1. This implies a requirement for Amn1 in proper cell cycle progression following mitosis.

REFERENCES

1. Geymonat M., et al. 2002. Control of mitotic exit in budding yeast. *In vitro* regulation of Tem1 GTPase by Bub2 and Bfa1. J. Biol. Chem. 277: 28439-28445.
2. Bardin A.J., et al. 2003. Mitotic exit regulation through distinct domains within the protein kinase Cdc15. Mol. Cell. Biol. 23: 5018-5030.
3. Hwa, L.H., et al. 2003. Inactivation of mitotic kinase triggers translocation of MEN components to mother-daughter neck in yeast. Mol. Biol. Cell 14: 4734-4743.
4. Yvert, G., et al. 2003. *Trans*-acting regulatory variation in *Saccharomyces cerevisiae* and the role of transcription factors. Nat. Genet. 35: 57-64.
5. Wang, Y., et al. 2003. Exit from exit: resetting the cell cycle through Amn1 inhibition of G protein signaling. Cell 112: 697-709.
6. Molk J.N., et al. 2004. The differential roles of budding yeast Tem1p, Cdc15p, and Bub2p protein dynamics in mitotic exit. Mol. Biol. Cell 15: 1519-1532.
7. Fraschini, R., et al. 2004. Functional characterization of Dma1 and Dma2, the budding yeast homologues of *Schizosaccharomyces pombe* Dma1 and human Chfr. Mol. Biol. Cell 15: 3796-3810.

SOURCE

Amn1 (yK-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Amn1 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-28173 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.

RESEARCH USE

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

APPLICATIONS

Amn1 (yK-15) is recommended for detection of Amn1 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 Amn1: 62 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.

PROTOCOLS

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