SANTA CRUZ BIOTECHNOLOGY, INC.

Ime1 (yE-16): sc-26447

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

In the budding yeast *Saccharomyces cerevisiae*, entry into meiosis and its successful completion depend on two positive regulators, Ime1 and Ime2. Ime1 is a transcriptional activator that is required for transcription of IME2, a serine/threonine protein kinase. Meiosis in colonies is triggered by changes in the nutrient environment as colonies mature. Transcription of IME1 is detected under conditions of starvation for nitrogen and glucose, and in the presence of the MATα1 and MATα2 gene products. G_1 cyclins block the Ime1 pathway to make mitosis and meiosis incompatible in budding yeast. Positive and negative feedback loops affect the transcription of IME1.

REFERENCES

1. Shefer-Vaida, M., Sherman, A., Ashkenazi, T., Robzyk, K. and Kassir, Y. 1995. Positive and negative feedback loops affect the transcription of IME1, a positive regulator of meiosis in *Saccharomyces cerevisiae*. Dev. Genet. 16: 219-228.
2. Colomina, N., Gari, E., Gallego, C., Herrero, E. and Aldea, M. 1999. G_1 cyclins block the Ime1 pathway to make mitosis and meiosis incompatible in budding yeast. EMBO J. 18: 320-329.
3. Kunoh, T., Kaneko, Y. and Harashima, S. 2000. YHP1 encodes a new homeoprotein that binds to the IME1 promoter in *Saccharomyces cerevisiae*. Yeast 16: 439-449.
4. Purnapatre, K. and Honigberg, S.M. 2002. Meiotic differentiation during colony maturation in *Saccharomyces cerevisiae*. Curr. Genet. 42: 1-8.
5. Guttmann-Raviv, N., Martin, S. and Kassir, Y. 2002. Ime2, a meiosis-specific kinase in yeast, is required for destabilization of its transcriptional activator, Ime1. Mol. Cell. Biol. 22: 2047-2056.
6. Purnapatre, K. and Honigberg, S.M. 2002. Meiotic differentiation during colony maturation in *Saccharomyces cerevisiae*. Curr. Genet. 42: 1-8.

SOURCE

Ime1 (yE-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Ime1 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-26447 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

Ime1 (yE-16) is recommended for detection of Ime1 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™ 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.

RESEARCH USE

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