SANTA CRUZ BIOTECHNOLOGY, INC.

Snm1 (yF-20): sc-26934

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

RNase MRP, a multisubunit ribonucleoprotein, plays a role in both mitochondrial DNA replication and nuclear 5.8S rRNA processing. Snm1 (suppressor of nuclear mitochondrial endoribonuclease 1) is a protein that is an essential component of yeast RNase MRP. Snm1 interacts with nm23-H1, another component of RNase MRP, and functions to cleave pre-rRNA and regulate the degradation of daughter cell-specific mRNAs. Snm1 can be divided into three structural regions: a leucine zipper near the amino-terminus, a binuclear zinc cluster in the mid-region and a serine- and lysine-rich region near the carboxy-terminus. Snm1 is a 198 amino acid protein that, due to its role in RNA processing and degradation events, is essential for yeast cell viability.

REFERENCES

1. Bennett, J.L. and Clayton, D.A. 1990. Efficient site-specific cleavage by RNase MRP requires interaction with two evolutionarily conserved mitochondrial RNA sequences. Mol. Cell. Biol. 10: 2191-2201.
2. Schmitt, M.E. and Clayton, D.A. 1994. Characterization of a unique protein component of yeast RNase MRP: an RNA-binding protein with a zinc-cluster domain. Genes Dev. 8: 2617-2628.
3. Cai, T., Reilly, T.R., Cerio, M., and Schmitt, M.E. 1999. Mutagenesis of Snm1, which encodes a protein component of the yeast RNase MRP, reveals a role for this ribonucleoprotein endoribonuclease in plasmid segregation. Mol. Cell. Biol. 19: 7857-7869. 10523674.
4. Venema, J., et al. 1999. Ribosome synthesis in *Saccharomyces cerevisiae*. Annu. Rev. Genet. 33: 261-311.
5. Houser-Scott, F., et al. 2002. Interactions among the protein and RNA subunits of *Saccharomyces cerevisiae* nuclear RNase P. Proc. Natl. Acad. Sci. USA 99: 2684-2689.
6. Walker, S.C., et al. 2004. A conserved element in the yeast RNase MRP RNA subunit can participate in a long-range base-pairing interaction. J. Mol. Biol. 341: 375-388.
7. Salinas, K., et al. 2005. Characterization and purification of *Saccharomyces cerevisiae* RNase MRP reveals a new unique protein component. J. Biol. Chem. 280: 11352-11360.

SOURCE

Snm1 (yF-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Snm1 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-26934 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.

APPLICATIONS

Snm1 (yF-20) is recommended for detection of Snm1 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.

PROTOCOLS

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