SANTA CRUZ BIOTECHNOLOGY, INC.

Nop1p (4i232): sc-71715

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The Power to Question

BACKGROUND

Nop1p is a phylogenetically conserved protein essential for efficient processing of pre-rRNA through its association with a class of small nucleolar RNAs during ribosomal biogenesis. Small nucleolar RNAs (snoRNAs) are associated in ribonucleoprotein particles localized to the nucleolus (snoRNPs). Nop1p (nucleolar protein 1) is structurally and functionally homologous to vertebrate Fibrillarin and is essential for viability. The *Saccharomyces cerevisiae* NOP1 gene encodes a 327 amino acid protein located within nucleolar structures resembling the dense fibrillar region of mammalian nucleoli. The yeast NOP1 gene codes for a protein which contains glycine/arginine rich sequence repeats at the amino terminus. Human Fibrillarin is specifically immunoprecipitated by antisera from humans with scleroderma autoimmune disease. In addition to its association with small nucleolar RNA, Nop1p is required for ribosome biogenesis.

REFERENCES

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SOURCE

Nop1p (4i232) is a mouse monoclonal antibody raised against a nuclear preparation of *S. cerevisiae* origin.

PRODUCT

Each vial contains 250 µl culture supernatant containing IgG_3 with PBS and < 0.1% sodium azide.

RESEARCH USE

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

APPLICATIONS

Nop1p (4i232) is recommended for detection of Nop1p of S. cerevisiae origin by Western Blotting (starting dilution to be determined by researcher, dilution range 1:500-1:2500), immunoprecipitation [1-2 µl per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution to be determined by researcher, dilution range 1:1000-1:10000).

Molecular Weight of Nop1p: 38 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

PROTOCOLS

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