

Nop56 (C-19): sc-23701

BACKGROUND

Nop1p (nucleolar protein 1) 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 is structurally and functionally homologous to vertebrate fibrillarin and is essential for viability. The *Saccharomyces cerevisiae* NOP1 gene encodes a protein resembling the dense fibrillar region of mammalian nucleoli. Nop5p functions with Nop1p in the execution of early pre-rRNA processing steps that lead to formation of 18 S rRNA. In Archaea, fibrillarin and Nop5p comprise the core complex of box C/D snoRNAs, which are responsible for site-specific 2'-hydroxyl methylation of ribosomal and transfer RNAs. Nop56p is a component of the box C/D small nucleolar ribonucleoprotein complexes that direct 2'-O-methylation of pre-rRNA during its maturation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: NOL5A (human) mapping to 20p13.

SOURCE

Nop56 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Nop56 of human 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-23701 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Nop56 (C-19) is recommended for detection of Nop56 and LOC338756 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

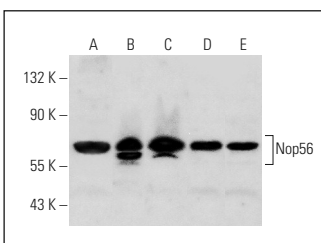
Molecular Weight of Nop56: 66 kDa.

Positive Controls: U-698-M whole cell lysate: sc-364799, NCI-H460 whole cell lysate: sc-364235 or A549 cell lysate: sc-2413.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Nop56 (C-19): sc-23701. Western blot analysis of Nop56 expression in U-698-M (A), NCI-H460 (B), A549 (C), HeLa (D) and HEK293 (E) whole cell lysates.

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.