

Nop17 (N-15): sc-168778

BACKGROUND

Nop17 (nucleolar protein 17), also known as PIH1D1, is a phylogenetically conserved protein essential for efficient processing of pre-rRNA through its association with a class of small nucleolar RNAs (snoRNAs) during ribosomal biogenesis. SnoRNAs are associated in ribonucleoprotein particles localized to the nucleolus. Nop17 is a 290 amino acid unstable protein that is stabilized through an interaction with HSP 90 α / β . Nop17 interacts with a core box C/D snoRNP protein Nop58, indicating a function of Nop17 in mediating the nucleolar retention or proper assembly of the box C/D snoRNP. A mutation in NOP17 gene may lead to a temperature-sensitive phenotype along with delocalization of key Nop proteins that are essential for snoRNP assembly.

REFERENCES

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6. McKeegan, K.S., et al. 2007. A dynamic scaffold of pre-snoRNP factors facilitates human box C/D snoRNP assembly. *Mol. Cell. Biol.* 27: 6782-6793.
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CHROMOSOMAL LOCATION

Genetic locus: PIH1D1 (human) mapping to 19q13.33; Pih1d1 (mouse) mapping to 7 B4.

SOURCE

Nop17 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Nop17 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-168778 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Nop17 (N-15) is recommended for detection of Nop17 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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); non cross-reactive with other Nop family members.

Suitable for use as control antibody for Nop17 siRNA (h): sc-97385, Nop17 siRNA (m): sc-150031, Nop17 shRNA Plasmid (h): sc-97385-SH, Nop17 shRNA Plasmid (m): sc-150031-SH, Nop17 shRNA (h) Lentiviral Particles: sc-97385-V and Nop17 shRNA (m) Lentiviral Particles: sc-150031-V.

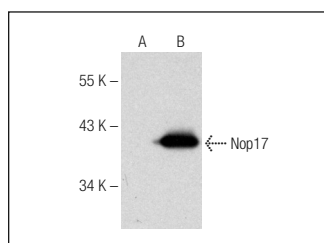
Molecular Weight of Nop17: 32 kDa.

Positive Controls: Nop17 (h): 293T Lysate: sc-177634.

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



Nop17 (N-15): sc-168778. Western blot analysis of Nop17 expression in non-transfected: sc-117752 (A) and human Nop17 transfected: sc-177634 (B) 293T whole cell lysates.

STORAGE

Store at 4 $^{\circ}$ 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.