## SANTA CRUZ BIOTECHNOLOGY, INC.

# Nop132 (T-13): sc-163163



## BACKGROUND

Nop132, also known as NOL8 (nucleolar protein 8), is a 1,167 amino acid nuclear protein that contains one RRM (RNA recognition motif) domain and exists as 4 alternatively spliced isoforms. While playing an essential role in the survival of diffuse-type gastric cancer cells, Nop132 may also be involved in the regulation of post-transcriptional gene expression and ribosome biogenesis of cancer cells. Although it is expressed at low levels in skeletal muscle, Nop132 is upregulated in diffuse-type gastric cancers. Nop132 interacts with NIP7, as well as the GTP form of Rag A/B, Rag C and Rag D. The gene that encodes Nop132 consists of approximately 28,237 bases and maps to human chromosome 9q22.31. Housing over 900 genes, chromosome 9 comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

## CHROMOSOMAL LOCATION

Genetic locus: NOL8 (human) mapping to 9q22.31; Nol8 (mouse) mapping to 13 A5.

## SOURCE

Nop132 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Nop132 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-163163 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### APPLICATIONS

Nop132 (T-13) is recommended for detection of Nop132 of human origin and NOL8 of mouse and rat 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); non cross-reactive with other Nop family members.

Nop132 (T-13) is also recommended for detection of Nop132 in additional species, including bovine.

Suitable for use as control antibody for Nop132 siRNA (h): sc-92977, NOL8 siRNA (m): sc-150026, Nop132 shRNA Plasmid (h): sc-92977-SH, NOL8 shRNA Plasmid (m): sc-150026-SH, Nop132 shRNA (h) Lentiviral Particles: sc-92977-V and NOL8 shRNA (m) Lentiviral Particles: sc-150026-V.

Molecular Weight of Nop132 isoforms: 132/124/118/127 kDa.

Molecular Weight of NOL8 isoforms: 129/34 kDa.

#### **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



Nop132 (T-13): sc-163163. Immunofluorescence staining of methanol-fixed HeLa cells showing nucleolar and nuclear localization.

#### **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.

#### MONOS Satisfation Guaranteed

Try **Nop132 (D-7): sc-390011**, our highly recommended monoclonal alternative to Nop132 (T-13).