

# NSUN6 (N-16): sc-83453



The Power to Question

## BACKGROUND

The nucleolus consists of a number of specific proteins that play a critical role in the assembly of ribosomes, as well as in the maintenance and structural integrity of the nucleolus. NSUN6 (NOL1/NOP2/Sun domain family member 6), also known as NOPD1 (NOL1/NOP2/Sun and PUA domain-containing protein 1), is a 469 amino acid protein that belongs to the methyltransferase superfamily. NSUN6 contains 1 PUA domain and may have S-adenosyl-L-methionine-dependent methyl-transferase activity. The gene encoding NSUN6 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

## REFERENCES

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3. Deloukas, P., et al. 2004. The DNA sequence and comparative analysis of human chromosome 10. *Nature* 429: 375-381.
4. Nonneman, D. and Rohrer, G.A. 2004. Comparative mapping of human chromosome 10 to pig chromosomes 10 and 14. *Anim. Genet.* 35: 338-343.
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## CHROMOSOMAL LOCATION

Genetic locus: NSUN6 (human) mapping to 10p12.31; Nsun6 (mouse) mapping to 2 A2.

## SOURCE

NSUN6 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of NSUN6 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-83453 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-83453 X, 200 µg/0.1 ml.

## APPLICATIONS

NSUN6 (N-16) is recommended for detection of NSUN6 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 NSUN family members.

NSUN6 (N-16) is also recommended for detection of NSUN6 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NSUN6 siRNA (h): sc-75968, NSUN6 siRNA (m): sc-75969, NSUN6 shRNA Plasmid (h): sc-75968-SH, NSUN6 shRNA Plasmid (m): sc-75969-SH, NSUN6 shRNA (h) Lentiviral Particles: sc-75968-V and NSUN6 shRNA (m) Lentiviral Particles: sc-75969-V.

NSUN6 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NSUN6: 52 kDa.

Positive Controls: 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) 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.