

NSUN6 (h): 293T Lysate: sc-115359

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 one 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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2. Deloukas, P., et al. 2000. Report of the third international workshop on human chromosome 10 mapping and sequencing 1999. *Cytogenet. Cell Genet.* 90: 1-12.
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.
5. Sakita-Suto, S., et al. 2007. Aurora-B regulates RNA methyltransferase NSUN2. *Mol. Biol. Cell* 18: 1107-1117.
6. Cho, M.Y., et al. 2008. First report of ovarian dysgerminoma in Cowden syndrome with germline PTEN mutation and PTEN-related 10q loss of tumor heterozygosity. *Am. J. Surg. Pathol.* 32: 1258-1264.
7. SWISS-PROT/TrEMBL (Q8TEA1). World Wide Web URL: <http://www.uniprot.org/uniprot/Q8TEA1>

CHROMOSOMAL LOCATION

Genetic locus: NSUN6 (human) mapping to 10p12.31.

PRODUCT

NSUN6 (h): 293T Lysate represents a lysate of human NSUN6 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

NSUN6 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive NSUN6 antibodies. Recommended use: 10-20 µl per lane.

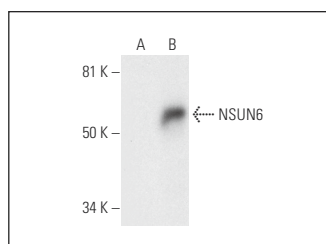
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NSUN6 (D-5): sc-393446 is recommended as a positive control antibody for Western Blot analysis of enhanced human NSUN6 expression in NSUN6 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



NSUN6 (D-5): sc-393446. Western blot analysis of NSUN6 expression in non-transfected: sc-117752 (A) and human NSUN6 transfected: sc-115359 (B) 293T whole cell lysates.

RESEARCH USE

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