

NO66 (P-15): sc-70297

BACKGROUND

The nucleolus is an essential component of the nucleus and it functions in the synthesis, processing and assembly of ribosomal RNAs with ribosomal proteins. NO66 (nucleolar protein 66), also known as C14orf169, is a 641 amino acid protein that localizes to nucleoplasmic foci and nucleoli, with specific localization to a granular part of the nucleolus. Expressed throughout the body, NO66 is thought to play a role in remodeling of certain heterochromatic regions, as well as in the synthesis of the large ribosomal subunit, suggesting involvement in replication-related events. NO66 contains one JmjC domain, two putative nuclear localization signals and several potential phosphorylation sites. Immunohistochemical analysis indicates that NO66 localizes to different subnuclear compartments in different cell lines. Homologs of NO66 have been detected in cell lines from a variety of species. NO66 may be a novel therapeutic target oncogene for lung cancer.

REFERENCES

1. Eilbracht, J., Reichenzeller, M., Hergt, M., Schnölzer, M., Heid, H., Stöhr, M., Franke, W.W. and Schmidt-Zachmann, M.S. 2004. NO66, a highly conserved dual location protein in the nucleolus and in a special type of synchronously replicating chromatin. *Mol. Biol. Cell* 15: 1816-1832.
2. Eilbracht, J., Kneissel, S., Hofmann, A. and Schmidt-Zachmann, M.S. 2005. Protein NO52—a constitutive nucleolar component sharing high sequence homologies to protein NO66. *Eur. J. Cell Biol.* 84: 279-294.
3. Suzuki, C., Takahashi, K., Hayama, S., Ishikawa, N., Kato, T., Ito, T., Tsuchiya, E., Nakamura, Y. and Daigo, Y. 2007. Identification of Myc-associated protein with JmjC domain as a novel therapeutic target oncogene for lung cancer. *Mol. Cancer Ther.* 6: 542-551.
4. Boisvert, F.M., van Koningsbruggen, S., Navascués, J. and Lamond, A.I. 2007. The multifunctional nucleolus. *Nat. Rev. Mol. Cell Biol.* 8: 574-585.
5. Sirri, V., Urcuqui-Inchima, S., Roussel, P. and Hernandez-Verdun, D. 2007. Nucleolus: the fascinating nuclear body. *Histochem. Cell Biol.* 129: 13-31.

CHROMOSOMAL LOCATION

Genetic locus: C14orf169 (human) mapping to 14q24.3; NO66 (mouse) mapping to 12 D3.

SOURCE

NO66 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NO66 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-70297 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-70297 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

NO66 (P-15) is recommended for detection of NO66 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).

NO66 (P-15) is also recommended for detection of NO66 in additional species, including bovine and porcine.

Suitable for use as control antibody for NO66 siRNA (h): sc-75939, NO66 siRNA (m): sc-75940, NO66 shRNA Plasmid (h): sc-75939-SH, NO66 shRNA Plasmid (m): sc-75940-SH, NO66 shRNA (h) Lentiviral Particles: sc-75939-V and NO66 shRNA (m) Lentiviral Particles: sc-75940-V.

NO66 (P-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NO66: 66 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

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 or our catalog for detailed protocols and support products.


 MONOS
 Satisfation
 Guaranteed

Try **NO66 (E-8): sc-390421** or **NO66 (3354C5a): sc-81341**, our highly recommended monoclonal alternatives to NO66 (P-15).