SANTA CRUZ BIOTECHNOLOGY, INC.

NO66 (3354C5a): sc-81341

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 and 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.
6. LocusLink Report (LocusID: 79697). http://www.ncbi.nlm.nih.gov/LocusLink/

CHROMOSOMAL LOCATION

Genetic locus: C14orf169 (human) mapping to 14q24.3.

SOURCE

NO66 (3354C5a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of NO66 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

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

APPLICATIONS

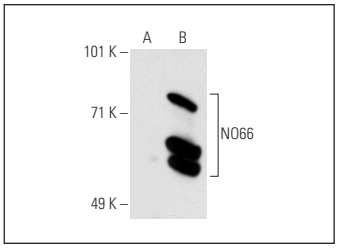
NO66 (3354C5a) is recommended for detection of NO66 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

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

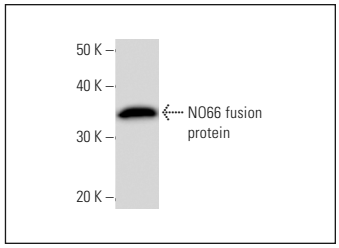
Molecular Weight of NO66: 66 kDa.

Positive Controls: NO66 (h): 293 Lysate: sc-111061 or Hep G2 cell lysate: sc-2227.

DATA



NO66 (3354C5a): sc-81341. Western blot analysis of NO66 expression in non-transfected: sc-110760 (**A**) and human NO66 transfected: sc-111061 (**B**) 293 whole cell lysates.



NO66 (3354C5a): sc-81341. Western Blot analysis of human recombinant NO66 fusion protein.

SELECT PRODUCT CITATIONS

1. Rojas, A., Aguilar, R., Henriquez, B., Lian, J.B., Stein, J.L., Stein, G.S., van Wijnen, A.J., van Zundert, B., Allende, M.L. and Montecino, M. 2015. Epigenetic control of the bone-master Runx2 gene during osteoblast-lineage commitment by the histone demethylase JARID1B/KDM5B. J. Biol. Chem. 290: 28329-28342.

PROTOCOLS

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