SANTA CRUZ BIOTECHNOLOGY, INC.

NO66 (E-8): sc-390421

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

ZBACKGROUND

The nucleolus is an essential component of the nucleus which functions in the synthesis, processing and assembly of ribosomal RNAs with ribosomal proteins. NO66 (nucleolar protein 66 kDa), also known as C14orf169 (chromosome 14 open reading frame 169), 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 the 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., et al. 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., et al. 2005. Protein NO52—a constitutive nucleolar component sharing high sequence homologies to protein NO66. Eur. J. Cell Biol. 84: 279-294.
3. Suzuki, C., et al. 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., et al. 2007. The multifunctional nucleolus. Nat. Rev. Mol. Cell Biol. 8: 574-585.
5. Sirri, V., et al. 2007. Nucleolus: the fascinating nuclear body. Histochem. Cell Biol. 129: 13-31.

CHROMOSOMAL LOCATION

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

SOURCE

NO66 (E-8) is a mouse monoclonal antibody raised against amino acids 406-641 mapping at the C-terminus of NO66 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NO66 (E-8) is available conjugated to agarose (sc-390421 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390421 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390421 PE), fluorescein (sc-390421 FITC), Alexa Fluor® 488 (sc-390421 AF488), Alexa Fluor® 546 (sc-390421 AF546), Alexa Fluor® 594 (sc-390421 AF594) or Alexa Fluor® 647 (sc-390421 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390421 AF680) or Alexa Fluor® 790 (sc-390421 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

NO66 (E-8) is recommended for detection of NO66 of human origin by Western Blotting (starting dilution 1:100, 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).

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.

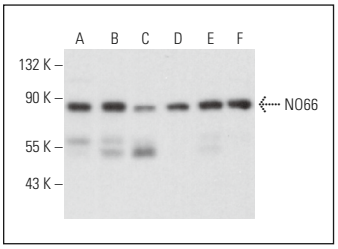
Molecular Weight of NO66: 66 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, A549 cell lysate: sc-2413 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



NO66 (E-8): sc-390421. Western blot analysis of NO66 expression in Hep G2 (**A**), A549 (**B**), NCI-H292 (**C**), NCI-H460 (**D**), NTERA-2 cl.D1 (**E**) and HeLa (**F**) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.

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.