NUB1 (C-13): sc-48059



The Power to Question

BACKGROUND

NEDD8 is a ubiquitin-like protein that controls vital biological events through its conjugation to cullin proteins. NEDD8 ultimate buster-1 (NUB1), is a negative regulator of the NEDD8 system that recruits NEDD8 and its conjugates to the proteasome for degradation. It is, therefore, a cell growth regulator. The UBA domain of NUB1 is the specific acceptor for the linear ubiquitin precursor. NUB1 is composed of 601 amino acids. It is an interferon-inducible protein and predominantly localizes in the nucleus. NUB1 is specifically expressed in adult human testis, ovary, heart, and skeletal muscle tissues.

REFERENCES

- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607981. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- van der Spuy, J., Kim, J.H., Yu, Y.S., Szel, A., Luthert, P.J., Clark, B.J. and Cheetham, M.E. 2003. The expression of the Leber congenital amaurosis protein AIPL1 coincides with rod and cone photoreceptor development. Invest. Ophthalmol. Vis. Sci. 44: 5396-5403.
- Hipp, M.S., Raasi, S., Groettrup, M. and Schmidtke, G. 2004. NEDD8 ultimate buster-1L interacts with the ubiquitin-like protein FAT10 and accelerates its degradation. J. Biol. Chem. 279: 16503-16510.
- Kanaya, K., Sohocki, M.M. and Kamitani, T. 2004. Abolished interaction of NUB1 with mutant AIPL1 involved in Leber congenital amaurosis. Biochem. Biophys. Res. Commun. 317: 768-773.
- Tanaka, T., Yeh, E.T. and Kamitani, T. 2004. NUB1-mediated targeting of the ubiquitin precursor UbC1 for its C-terminal hydrolysis. Eur. J. Biochem. 271: 972-982.
- van der Spuy, J. and Cheetham, M.E. 2004. The Leber congenital amaurosis protein AIPL1 modulates the nuclear translocation of NUB1 and suppresses inclusion formation by NUB1 fragments. J. Biol. Chem. 279: 48038-48047.

CHROMOSOMAL LOCATION

Genetic locus: NUB1 (human) mapping to 7q36.1.

SOURCE

NUB1 (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of NUB1 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, ready P, $(100 \mu g)$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

NUB1 (C-13) is recommended for detection of NUB1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

NUB1 (C-13) is also recommended for detection of NUB1 in additional species, including canine.

Suitable for use as control antibody for NUB1 siRNA (h): sc-61237, NUB1 shRNA Plasmid (h): sc-61237-SH and NUB1 shRNA (h) Lentiviral Particles: sc-61237-V.

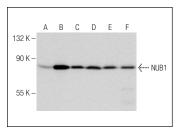
Molecular Weight of NUB1: 69.1 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, Ramos nuclear extract: sc-2153 or Jurkat nuclear extract: sc-2132.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



NUB1 (C-13): sc-48059. Western blot analysis of NUB1 expression in HeLa (A), Ramos (B), Jurkat (C), Hep G2 (D) and K-562 (E) nuclear extracts and SK-N-SH whole cell Ivsate (F).

RESEARCH USE

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



Try **NUB1 (F-10):** sc-377003, our highly recommended monoclonal alternative to NUB1 (C-13).