SANTA CRUZ BIOTECHNOLOGY, INC.

NUB1 (H-71): sc-134516

SANTA CRUZ BIOTECHNOLOGY

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 with a molecular mass of 69.1 kDa. 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

1. 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/
2. van der Spuy, J., Kim, J.H., Yu, YS., 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.
3. 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.
4. 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.
5. 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.
6. 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; Nub1 (mouse) mapping to 5 A3.

SOURCE

NUB1 (H-71) is a rabbit polyclonal antibody raised against amino acids 272-342 mapping within an internal region 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.

STORAGE

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

APPLICATIONS

NUB1 (H-71) is recommended for detection of NUB1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

NUB1 (H-71) is also recommended for detection of NUB1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NUB1 siRNA (h): sc-61237, NUB1 siRNA (m): sc-61238, NUB1 shRNA Plasmid (h): sc-61237-SH, NUB1 shRNA Plasmid (m): sc-61238-SH, NUB1 shRNA (h) Lentiviral Particles: sc-61237-V and NUB1 shRNA (m) Lentiviral Particles: sc-61238-V.

Molecular Weight of NUB1: 69.1 kDa.

Positive Controls: Ramos cell lysate: sc-2216.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.