

# NUB1 (F-10): sc-377003

## 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

1. Online Mendelian Inheritance in Man, OMIM<sup>™</sup>. 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., et al. 2003. The expression of rod and cone photoreceptor development. *Invest. Ophthalmol. Vis. Sci.* 44: 5396-5403.
3. Hipp, M.S., et al. 2004. NEDD8 ultimate buster-1L interacts with the ubiquitin-like protein FAT10 and accelerates its degradation. *J. Biol. Chem.* 279: 16503-16510.
4. 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.
5. Kanaya, K., et al. 2004. Abolished interaction of NUB1 with mutant AIPL1 involved in Leber congenital amaurosis. *Biochem. Biophys. Res. Commun.* 317: 768-773.
6. Tanaka, T., et al. 2004. NUB1-mediated targeting of the ubiquitin precursor Ubc1 for its C-terminal hydrolysis. *Eur. J. Biochem.* 271: 972-982.

## CHROMOSOMAL LOCATION

Genetic locus: NUB1 (human) mapping to 7q36.1; Nub1 (mouse) mapping to 5 A3.

## SOURCE

NUB1 (F-10) is a mouse monoclonal antibody raised against amino acids 272-342 mapping within an internal region of NUB1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

NUB1 (F-10) is available conjugated to agarose (sc-377003 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377003 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377003 PE), fluorescein (sc-377003 FITC), Alexa Fluor<sup>®</sup> 488 (sc-377003 AF488), Alexa Fluor<sup>®</sup> 546 (sc-377003 AF546), Alexa Fluor<sup>®</sup> 594 (sc-377003 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-377003 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-377003 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-377003 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

NUB1 (F-10) is recommended for detection of NUB1 of mouse, rat and 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 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.

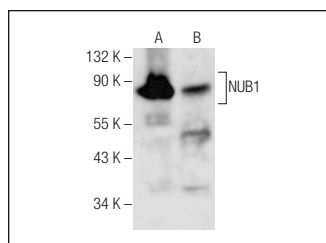
Molecular Weight of NUB1: 69 kDa.

Positive Controls: Ramos cell lysate: sc-2216, BYDP whole cell lysate: sc-364368 or HEK293 whole cell lysate: sc-45136.

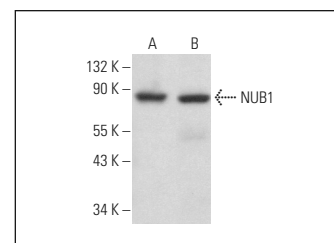
## RECOMMENDED SUPPORT REAGENTS

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<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



NUB1 (F-10): sc-377003. Western blot analysis of NUB1 expression in Ramos (A) and HEK293 (B) whole cell lysates.



NUB1 (F-10): sc-377003. Western blot analysis of NUB1 expression in Ramos (A) and BYDP (B) whole cell lysates.

## 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](http://www.scbt.com) for detailed protocols and support products.