

# NUBP2 (A-15): sc-165135

## BACKGROUND

NUBP2 (nucleotide binding protein 2), also known as cytosolic Fe/S cluster assembly factor NUBP2, is a 271 amino acid protein and component of cytosolic iron-sulfur (Fe/S) protein assembly machinery. Localizing to both nucleus and cytoplasm, NUBP2 is found at centrosomes during mitosis and is widely expressed, with highest levels of expression in skeletal muscle and fetal liver, lung, brain and kidney. NUBP2 is essential for extramitochondrial Fe/S protein maturation and is thought to transfer a labile 4Fe-4S cluster to various apoproteins. NUBP2 is a member of the NUBP/MRP gene subfamily of ATP-binding proteins and is encoded by a gene that maps to human chromosome 16p13.3 and mouse chromosome 17 A3.3.

## REFERENCES

1. Nakashima, H., Grahovac, M.J., Mazzarella, R., Fujiwara, H., Kitchen, J.R., Threat, T.A. and Ko, M.S. 1999. Two novel mouse genes—Nubp2, mapped to the t-complex on chromosome 17, and Nubp1, mapped to chromosome 16—establish a new gene family of nucleotide-binding proteins in eukaryotes. *Genomics* 60: 152-160.
2. Roy, A., Solodovnikova, N., Nicholson, T., Antholine, W. and Walden, W.E. 2003. A novel eukaryotic factor for cytosolic Fe-S cluster assembly. *EMBO J.* 22: 4826-4835.
3. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610779. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Stehling, O., Netz, D.J., Niggemeyer, B., Rösser, R., Eisenstein, R.S., Puccio, H., Pierik, A.J. and Lill, R. 2008. Human Nbp35 is essential for both cytosolic iron-sulfur protein assembly and iron homeostasis. *Mol. Cell. Biol.* 28: 5517-5528.
5. Hosgood, H.D., Menashe, I., He, X., Chanock, S. and Lan, Q. 2009. PTEN identified as important risk factor of chronic obstructive pulmonary disease. *Respir. Med.* 103: 1866-1870.

## CHROMOSOMAL LOCATION

Genetic locus: NUBP2 (human) mapping to 16p13.3; Nubp2 (mouse) mapping to 17 A3.3.

## SOURCE

NUBP2 (A-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of NUBP2 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, sc-165135 P, (100 µg 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

NUBP2 (A-15) is recommended for detection of NUBP2 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); non cross-reactive with NUBP1 or NUBPL.

Suitable for use as control antibody for NUBP2 siRNA (h): sc-93406, NUBP2 siRNA (m): sc-150091, NUBP2 shRNA Plasmid (h): sc-93406-SH, NUBP2 shRNA Plasmid (m): sc-150091-SH, NUBP2 shRNA (h) Lentiviral Particles: sc-93406-V and NUBP2 shRNA (m) Lentiviral Particles: sc-150091-V.

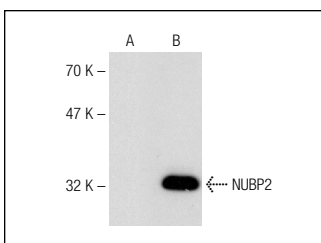
Molecular Weight of NUBP2: 30 kDa.

Positive Controls: NUBP2 (m): 293T Lysate: sc-122148.

## 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



NUBP2 (A-15): sc-165135. Western blot analysis of NUBP2 expression in non-transfected: sc-117752 (A) and mouse NUBP2 transfected: sc-122148 (B) 293T whole cell lysates.

## RESEARCH USE

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

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Try **NUBP2 (C-12): sc-376784** or **NUBP2 (A-11): sc-376785**, our highly recommended monoclonal alternatives to NUBP2 (A-15).