

# Nup88 (N-16): sc-74764

## BACKGROUND

The nuclear pore complex (NPC) mediates bidirectional macromolecular traffic between the nucleus and cytoplasm in eukaryotic cells and is comprised of more than 100 different subunits. Many of the subunits belong to a family called nucleoporins (Nups), which are characterized by the presence of O-linked-N-acetylglucosamine moieties and a distinctive pentapeptide repeat (XFYFG). Nup88 (nucleoporin 88 kDa) is a 741 amino acid protein that localizes to the nucleus and functions as an essential component of the nuclear pore complex. Expressed ubiquitously, Nup88 is subject to phosphorylation by ATM or ATR and is upregulated in malignant neoplasms and precancerous dysplasias, suggesting a role in tumorigenesis. The gene encoding Nup88 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: NUP88 (human) mapping to 17p13.2; Nup88 (mouse) mapping to 11 B4.

## SOURCE

Nup88 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Nup88 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-74764 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Nup88 (N-16) is recommended for detection of Nup88 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Nup88 (N-16) is also recommended for detection of Nup88 in additional species, including equine and bovine.

Suitable for use as control antibody for Nup88 siRNA (h): sc-75980, Nup88 siRNA (m): sc-75981, Nup88 shRNA Plasmid (h): sc-75980-SH, Nup88 shRNA Plasmid (m): sc-75981-SH, Nup88 shRNA (h) Lentiviral Particles: sc-75980-V and Nup88 shRNA (m) Lentiviral Particles: sc-75981-V.

Molecular Weight of Nup88: 88 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or A-431 whole cell lysate: sc-2201.

## 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) 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<sup>™</sup> Mounting Medium: sc-24941.

## 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) or our catalog for detailed protocols and support products.