



# Nup188 (T-15): sc-103659

## BACKGROUND

Nuclear pore complexes (NPCs) are the channels for the bi-directional movement of macromolecules between the nucleus and cytoplasm, and contain more than 100 different subunits. Many of them belong to a family called nucleoporins, which are characterized by the presence of O-linked N-acetylglucosamine moieties and a distinctive pentapeptide repeat (XFXFG). Nucleoporin NUP188 homolog, also known as Nup188 or hNup188, is a 1,749 amino acid member of the nucleoporin family of proteins. Forming a complex with two other NUP proteins, the Nup93-Nup188-Nup205 complex is believed to be an important structural building block of the pore complex. Two isoforms of Nup188 exist as a result of alternative splicing events.

## REFERENCES

1. Zabel, U., et al. 1996. Nic96p is required for nuclear pore formation and functionally interacts with a novel nucleoporin, Nup188p. *J. Cell Biol.* 133: 1141-1152.
2. Nehrbass, U., et al. 1996. The yeast nucleoporin Nup188p interacts genetically and physically with the core structures of the nuclear pore complex. *J. Cell Biol.* 133: 1153-1162.
3. Ryan, K.J. and Wenthe, S.R. 2000. The nuclear pore complex: a protein machine bridging the nucleus and cytoplasm. *Curr. Opin. Cell Biol.* 12: 361-371.
4. Miller, B.R., et al. 2000. Identification of a new vertebrate nucleoporin, Nup188, with the use of a novel organelle trap assay. *Mol. Biol. Cell.* 11: 3381-3396.
5. Vasu, S., et al. 2001. Novel vertebrate nucleoporins Nup133 and Nup160 play a role in mRNA export. *J. Cell Biol.* 155: 339-354.
6. Galy, V., et al. 2003. *Caenorhabditis elegans* nucleoporins Nup93 and Nup205 determine the limit of nuclear pore complex size exclusion *in vivo*. *Mol. Biol. Cell.* 14: 5104-5115.

## CHROMOSOMAL LOCATION

Genetic locus: NUP188 (human) mapping to 9q34.11; Nup188 (mouse) mapping to 2 B.

## SOURCE

Nup188 (T-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Nup188 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-103659 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

Nup188 (T-15) is recommended for detection of Nup188 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); non cross-reactive with other Nup family members.

Suitable for use as control antibody for Nup188 siRNA (h): sc-92946, Nup188 siRNA (m): sc-106319, Nup188 shRNA Plasmid (h): sc-92946-SH, Nup188 shRNA Plasmid (m): sc-106319-SH, Nup188 shRNA (h) Lentiviral Particles: sc-92946-V and Nup188 shRNA (m) Lentiviral Particles: sc-106319-V.

Molecular Weight of Nup188: 196 kDa.

## 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) 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.

## 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.