

Nup160 (N-20): sc-27401

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). Nuclear pore complex protein Nup160 (Nup160), together with Nup133, Nup107 and Nup96, forms the Nup160 subcomplex in the nuclear pore. This complex is important in RNA export and interacts with Nup98 and Nup153.

REFERENCES

1. McMorrow, I., et al. 1994. Sequence analysis of cDNA encoding a human nuclear pore complex protein, hnup152. *Biochim. Biophys. Acta* 1217: 219-223.
2. Bodoor, K., et al. 1999. Sequential recruitment of NPC proteins to the nuclear periphery at the end of mitosis. *J. Cell Sci.* 112: 2253-2264.
3. Fontoura, B.M., et al. 1999. A conserved biogenesis pathway for nucleoporins: proteolytic processing of a 186 kDa precursor generates Nup98 and the novel nucleoporin, Nup96. *J. Cell Biol.* 144: 1097-1112.
4. Griffis, E.R., et al. 2003. Nup98 localizes to both nuclear and cytoplasmic sides of the nuclear pore and binds to two distinct nucleoporin subcomplexes. *Mol. Biol. Cell* 14: 600-610.
5. Boehmer, T., et al. 2003. Depletion of a single nucleoporin, Nup107, prevents the assembly of a subset of nucleoporins into the nuclear pore complex. *Proc. Natl. Acad. Sci. USA* 100: 981-985.
6. Krull, S., et al. 2004. Nucleoporins as components of the nuclear pore complex core structure and Tpr as the architectural element of the nuclear basket. *Mol. Biol. Cell* 15: 4261-4277.

CHROMOSOMAL LOCATION

Genetic locus: NUP160 (human) mapping to 11p11.2; Nup160 (mouse) mapping to 2 E1.

SOURCE

Nup160 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Nup160 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-27401 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.

RESEARCH USE

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

APPLICATIONS

Nup160 (N-20) is recommended for detection of Nup160 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Nup160 (N-20) is also recommended for detection of Nup160 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for Nup160 siRNA (h): sc-106318, Nup160 siRNA (m): sc-150119, Nup160 shRNA Plasmid (h): sc-106318-SH, Nup160 shRNA Plasmid (m): sc-150119-SH, Nup160 shRNA (h) Lentiviral Particles: sc-106318-V and Nup160 shRNA (m) Lentiviral Particles: sc-150119-V.

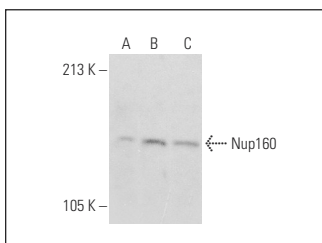
Molecular Weight of Nup160: 160 kDa.

Positive Controls: C6 whole cell lysate: sc-364373, PC-12 cell lysate: sc-2250 or rat liver extract: sc-2395.

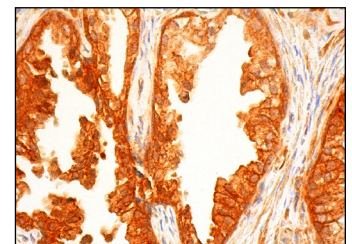
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Nup160 (N-20): sc-27401. Western blot analysis of Nup160 expression in C6 (A) and PC-12 (B) whole cell lysates and rat liver tissue extract (C).



Nup160 (N-20): sc-27401. Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing nuclear envelope and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Asally, M., et al. 2011. Nup358, a nucleoporin, functions as a key determinant of the nuclear pore complex structure remodeling during skeletal myogenesis. *FEBS J.* 278: 610-621.