

Nup133 (C-17): sc-27394

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 Nup133 (Nucleoporin Nup133) is located on both the cytoplasmic and nuclear sides of the nuclear pore, localizing to the kinetochores during mitosis. It forms a part of the Nup160 nuclear pore subcomplex together with Nup160, Nup96 and Nup107. This complex is important in RNA export.

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. Belgareh, N., et al. 2001. An evolutionarily conserved NPC subcomplex, which redistributes in part to kinetochores in mammalian cells. *J. Cell Biol.* 154: 1147-1160.
4. Vasu, S., et al. 2001. Novel vertebrate nucleoporins Nup133 and Nup160 play a role in mRNA export. *J. Cell Biol.* 155: 339-354.
5. Berke, I.C., et al. 2004. Structural and functional analysis of Nup133 domains reveals modular building blocks of the nuclear pore complex. *J. Cell Biol.* 167: 591-597.

CHROMOSOMAL LOCATION

Genetic locus: NUP133 (human) mapping to 1q42.13; Nup133 (mouse) mapping to 8 E2.

SOURCE

Nup133 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Nup133 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-27394 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

Nup133 (C-17) is recommended for detection of Nup133 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).

Nup133 (C-17) is also recommended for detection of Nup133 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Nup133 siRNA (h): sc-60035, Nup133 siRNA (m): sc-60036, Nup133 shRNA Plasmid (h): sc-60035-SH, Nup133 shRNA Plasmid (m): sc-60036-SH, Nup133 shRNA (h) Lentiviral Particles: sc-60035-V and Nup133 shRNA (m) Lentiviral Particles: sc-60036-V.

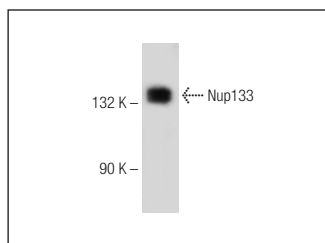
Molecular Weight of Nup133: 130 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, rat brain extract: sc-2392 or c4 whole cell lysate: sc-364186.

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



Nup133 (C-17): sc-27394. Western blot analysis of Nup133 expression in rat brain tissue extract.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **Nup133 (E-6): sc-376763** or **Nup133 (G-11): sc-515253**, our highly recommended monoclonal alternatives to Nup133 (C-17).