SANTA CRUZ BIOTECHNOLOGY, INC.

Nup153 (H-161): sc-292438



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). Nup153 is a peripheral NPC component that is implicated in protein and RNP transport and in the interaction of NPCs with the nuclear lamina. Nup153 contains a unique N-terminal region, a central domain consisting of 4 to 5 zinc fingers and a C-terminal region containing about 30 irregularly spaced FXFG repeats. Nup153 is cleaved by caspases during apoptosis. Nup153 interacts with TAP, which is essential for mRNA export, and associates with chromatin towards the end of anaphase, in parallel with the inner nuclear membrane protein LAP2. Nup153 is involved in NPC assembly, in anchoring NPCs within the nuclear envelope and in mediating specific nuclear import events.

CHROMOSOMAL LOCATION

Genetic locus: NUP153 (human) mapping to 6p22.3; Nup153 (mouse) mapping to 13 A5.

SOURCE

Nup153 (H-161) is a rabbit polyclonal antibody raised against amino acids 108-268 mapping near the N-terminus of Nup153 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

Nup153 (H-161) is recommended for detection of Nup153 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Nup153 (H-161) is also recommended for detection of Nup153 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Nup153 siRNA (h): sc-41279, Nup153 siRNA (m): sc-41280, Nup153 shRNA Plasmid (h): sc-41279-SH, Nup153 shRNA Plasmid (m): sc-41280-SH, Nup153 shRNA (h) Lentiviral Particles: sc-41279-V and Nup153 shRNA (m) Lentiviral Particles: sc-41280-V.

Molecular Weight of Nup153: 150-180 kDa.

Positive Controls: LADMAC nuclear extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



Nup153 expression in LADMAC nuclear extract.

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.

MONOS Satisfation Guaranteed

Try Nup153 (R3G1): sc-101544 or Nup153 (D-4): sc-515373, our highly recommended monoclonal alternatives to Nup153 (H-161).