

Nup98 (C-16): sc-14155

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). The NUP98 gene encodes precursor proteins that generate two nucleoplasmically oriented nucleoporins, Nup98 and Nup96. The O-linked glycoprotein, Nup98 is a component of the nuclear pore complex. Nup98 is essential for gastrulation, a developmental stage that is associated with rapid cell proliferation, but dispensable for basal cell growth. Nup98 plays a role in RNA export from the nucleus and it appears to be an essential component of multiple RNA export pathways. Nup98 is a member of the GLFG nucleoporin family. The t(7;11)(p15;p15) translocation in acute myeloid leukaemia fuses the genes for Nup98 and class I homeoprotein HoxA9. Nup98-HoxA9 fusion protein may promote leukemogenesis through inhibiting of HoxA9-mediated terminal differentiation and/or aberrant nucleocytoplasmic transport.

CHROMOSOMAL LOCATION

Genetic locus: NUP98 (human) mapping to 11p15.4; Nup98 (mouse) mapping to 7 E3.

SOURCE

Nup98 (C-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Nup98 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-14155 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Nup98 (L-20) is recommended for detection of Nup98 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).

Nup98 (C-16) is also recommended for detection of Nup98 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Nup96/98 siRNA (h): sc-43535, Nup96/98 siRNA (m): sc-43536, Nup96/98 shRNA Plasmid (h): sc-43535-SH, Nup96/98 shRNA Plasmid (m): sc-43536-SH, Nup96/98 shRNA (h) Lentiviral Particles: sc-43535-V and Nup96/98 shRNA (m) Lentiviral Particles: sc-43536-V.

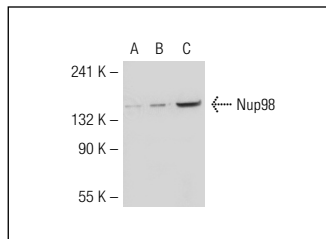
Molecular Weight of Nup98: 97 kDa.

Positive Controls: Nup98 (h): 293 Lysate: sc-113095, K-562 nuclear extract: sc-2130 or HeLa whole cell lysate: sc-2200.

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



Nup98 (C-16): sc-14155. Western blot analysis of Nup98 expression in non-transfected: sc-117752 (A) and human Nup98 transfected: sc-113095 (B) 293T whole cell lysates and K-562 nuclear extract (C).

SELECT PRODUCT CITATIONS

1. Ebina, H., et al. 2004. Role of Nup98 in nuclear entry of human immunodeficiency virus type 1 cDNA. *Microbes Infect.* 6: 715-724.

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 or our catalog for detailed protocols and support products.



Try **Nup98 (C-7): sc-74553** or **Nup98 (C-5): sc-74578**, our highly recommended monoclonal alternatives to Nup98 (C-16).