

# Nup98 (H-300): sc-30112

## 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 (XFYFG). 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 (H-300) is a rabbit polyclonal antibody raised against amino acids 581-880 mapping within an internal region 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.

## RESEARCH USE

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

## APPLICATIONS

Nup98 (H-300) 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 (H-300) is also recommended for detection of Nup98 in additional species, including equine, canine, bovine and porcine.

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.

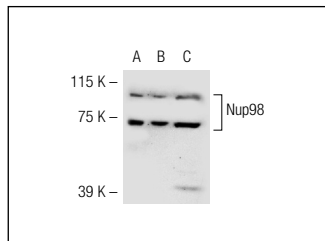
Molecular Weight of Nup98: 97 kDa.

Positive Controls: Nup98 (h2): 293T Lysate: sc-115764 or K-562 whole cell lysate: sc-2203.

## 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



Nup98 (H-300): sc-30112. Western blot analysis of Nup98 expression in non-transfected 293T: sc-117752 (A), human Nup98 transfected 293T: sc-115764 (B) and K-562 (C) whole cell lysates.

## SELECT PRODUCT CITATIONS

- Pan, Y., et al. 2007. Mislocalization of prelamin A Tyr646Phe mutant to the nuclear pore complex in human embryonic kidney 293 cells. *Biochem. Biophys. Res. Commun.* 355: 78-84.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **Nup98 (C-7): sc-74553** or **Nup98 (C-5): sc-74578**, our highly recommended monoclonal alternatives to Nup98 (H-300).