**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 glucosamine moieties and a distinctive pentapeptide repeat. Nup50 (nucleoporin 50), also known as NPAp60 or NPAp60L, is a nucleoplasmic fibril of the nuclear pore complex. Nup50 associates with various transport receptors including p27. While ubiquitously expressed, Nup50 is found at highest levels in peripheral blood leukocytes, testis and fetal liver, and contains multiple FG repeats in addition to a single RanBD1 domain.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: Nup50 (human) mapping to 22q13.31; Nup50 (mouse) mapping to 15 E2.

**SOURCE**

Nup50 (G-4) is a mouse monoclonal antibody raised against amino acids 43-166 mapping near the N-terminus of Nup50 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG, lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Nup50 (G-4) is available conjugated to agarose (sc-398993 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398993 HRP), 200 µg/ml, for WB, HICIP and ELISA; to either phycoerythrin (sc-398993 PE), fluorescein (sc-398993 FITC), Alexa Fluor® 468 (sc-398993 AF488), Alexa Fluor® 546 (sc-398993 AF546), Alexa Fluor® 594 (sc-398993 AF594) or Alexa Fluor® 647 (sc-398993 AF647), 200 µg/ml, for WB (RGB), IF, HICIP and FCM; and to either Alexa Fluor® 680 (sc-398993 AF680) or Alexa Fluor® 790 (sc-398993 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

Nup50 (G-4) is recommended for detection of Nup50 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for Nup50 siRNA (h): sc-75979, Nup50 siRNA (m): sc-150125, Nup50 shRNA Plasmid (h): sc-75979-SH, Nup50 shRNA Plasmid (m): sc-150125-SH, Nup50 shRNA (h) Lentiviral Particles: sc-75979-V and Nup50 shRNA (m) Lentiviral Particles: sc-150125-V.

Molecular Weight of Nup50: 50 kDa.

Positive Controls: F9 cell lysate: sc-2245, 3T3-L1 cell lysate: sc-2243 or Jurkat whole cell lysate: sc-2243.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

**SELECT PRODUCT CITATIONS**


**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.