BACKGROUND
The nuclear pore complex (NPC) mediates bidirectional macromolecular traffic between the nucleus and cytoplasm in eukaryotic cells and is comprised of more than 100 different subunits. Many of the subunits belong to a family called nucleoporins (Nups), which are characterized by the presence of O-linked-N-acetylglucosamine moieties and a distinctive pentapeptide repeat (XFXFG). Nup88 (nucleoporin 88 kDa) is a 741 amino acid protein that localizes to the nucleus and functions as an essential component of the nuclear pore complex. Expressed ubiquitously, Nup88 is subject to phosphorylation by ATM or ATR and is upregulated in malignant neoplasms and precancerous dysplasias, suggesting a role in tumorigenesis. The gene encoding Nup88 maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: NUP88 (human) mapping to 17p13.2; Nup88 (mouse) mapping to 11 B4.

SOURCE
Nup88 (H-7) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Nup88 of human origin.

PRODUCT
Each vial contains 200 μg IgGκ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE
Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS
Nup88 (H-7) is recommended for detection of Nup88 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 Nup88 siRNA (h): sc-75980, Nup88 siRNA (m): sc-75981, Nup88 shRNA Plasmid (h): sc-75980-SH, Nup88 shRNA Plasmid (m): sc-75981-SH, Nup88 shRNA (h) Lentiviral Particles: sc-75980-V and Nup88 shRNA (m) Lentiviral Particles: sc-75981-V.

Molecular Weight of Nup88: 88 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or A-431 whole cell lysate: sc-2201.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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-2035 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

SELECT PRODUCT CITATIONS

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