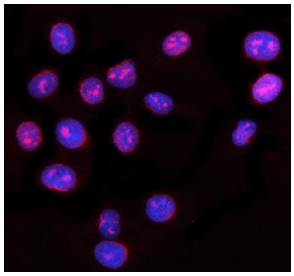
NUP62 Antibody / Nucleoporin 62 Antibody (FY12565)

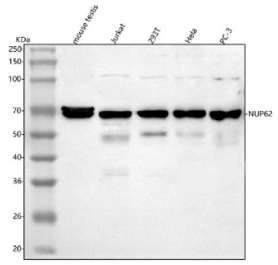
Catalog No.	Formulation	Size
FY12565	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

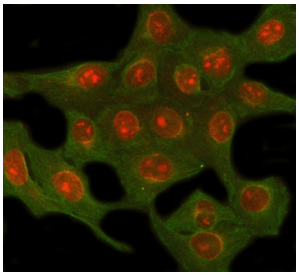
Availability	1-2 days
Species Reactivity	Human, Mouse
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P37198
Localization	Nuclear, cytoplasmic
Applications	ELISA: 0.1-0.5ug/ml Immunofluorescence: 5ug/ml Immunohistochemistry: 2-5ug/ml Immunocytochemistry: 5ug/ml Western Blot: 0.25-0.5ug/ml Flow cytometry: 1-3ug/million cells (Intracellular)
Limitations	This NUP62 Antibody / Nucleoporin 62 Antibody is available for research use only.



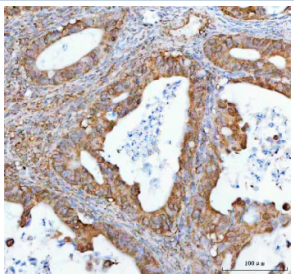
NUP62 Antibody in Human U2OS Osteosarcoma Cells IF. Immunofluorescence staining of human U2OS osteosarcoma cells with NUP62 Antibody / Nucleoporin 62 Antibody (red) at 5 ug/ml. Enzyme-mediated antigen retrieval was performed for 15 min, followed by blocking with 10% goat serum. Cells were incubated with the primary antibody overnight at 4oC. Cy3-conjugated goat anti-rabbit IgG was used as the secondary antibody at 1:500 for 30 min at 37oC, and nuclei were counterstained with DAPI (blue). NUP62 staining is concentrated in the nuclear region. This NUP62 Antibody enables visualization of Nucleoporin 62 expression and localization in human osteosarcoma cells.



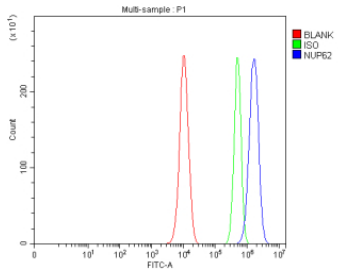
NUP62 Antibody in Human and Mouse Samples WB. Western blot testing of NUP62 Antibody / Nucleoporin 62 Antibody using lysates from 1) mouse testis, 2) human Jurkat cells, 3) human 293T cells, 4) human HeLa cells and 5) human PC-3 cells. The antibody was used at 0.5 ug/ml overnight at 4oC, followed by goat anti-rabbit IgG-HRP at 1:5000 and chemiluminescent detection. A strong band is detected at approximately 69 kDa in the human cell lines, consistent with the known slower SDS-PAGE migration of NUP62 relative to its calculated molecular weight of approximately 53 kDa. Mouse testis shows a ~69 kDa doublet. This NUP62 Antibody demonstrates detection of Nucleoporin 62 in human and mouse samples.



NUP62 Antibody and Beta Tubulin in Human U2OS Cells IF. Immunofluorescence staining of human U2OS osteosarcoma cells with NUP62 Antibody / Nucleoporin 62 Antibody (red) at 5 ug/ml and Beta Tubulin Antibody (green). Enzyme-mediated antigen retrieval was performed for 15 min, followed by blocking with 10% goat serum. Cells were incubated with the primary antibodies overnight at 4oC. Cy3-conjugated goat anti-rabbit IgG and DyLight 488-conjugated goat anti-mouse IgG were used as secondary antibodies at 1:500 for 30 min at 37oC. NUP62 staining is concentrated in the nuclear region, while Beta Tubulin highlights the cytoskeletal network. This NUP62 Antibody enables visualization of Nucleoporin 62 localization in human osteosarcoma cells.



NUP62 Antibody in Human Ovarian Cancer IHC. Immunohistochemistry staining of FFPE human ovarian cancer tissue with NUP62 Antibody / Nucleoporin 62 Antibody at 2 ug/ml. Heat-induced epitope retrieval (HIER) was performed in EDTA buffer, pH 8.0, followed by blocking with 10% goat serum. The tissue was incubated with the primary antibody overnight at 4oC, followed by a peroxidase-conjugated goat anti-rabbit IgG secondary antibody for 30 min at 37oC and DAB detection. NUP62 staining is observed in the tumor cells. This NUP62 Antibody demonstrates detection of Nucleoporin 62 in human ovarian cancer tissue.



NUP62 Antibody in Human PC-3 Prostate Cancer Cells FACS. Flow cytometry analysis of fixed and permeabilized human PC-3 prostate cancer cells with NUP62 Antibody / Nucleoporin 62 Antibody at 1 ug/million cells. Cells were blocked with 10% normal goat serum and incubated with the primary antibody for 30 min at 20oC. DyLight 488-conjugated goat anti-rabbit IgG was used as the secondary antibody at 5-10 ug/million cells for 30 min at 20oC. Red represents the unlabeled control, green represents the isotype control and blue represents NUP62 Antibody staining. A clear fluorescence shift is observed with NUP62 staining relative to the isotype control. This NUP62 Antibody demonstrates detection of Nucleoporin 62 in human prostate cancer cells by flow cytometry.

Description

NUP62 antibody detects Nucleoporin 62, a central channel component of the nuclear pore complex that mediates selective nucleocytoplasmic transport of macromolecules. NUP62 forms part of the symmetrical ring structure and contributes to the permeability barrier that controls RNA export and protein import. The NUP62 antibody is used in molecular biology, nuclear transport, and cell cycle research to investigate nuclear envelope dynamics and transport regulation.

NUP62 is encoded by the NUP62 gene located on human chromosome 19q13.32. The protein is approximately 520 amino acids long and contains multiple phenylalanine-glycine repeat motifs that create the selective barrier of the pore. NUP62 interacts with importins, exportins, and Ran GTPase to regulate directionality of cargo transport across the nuclear envelope.

The NUP62 antibody detects a 62 kilodalton band on western blot and shows punctate nuclear envelope staining by

immunofluorescence. NUP62 forms a subcomplex with NUP54 and NUP58 to create the central transport channel, undergoing dynamic conformational changes during translocation events. This structure selectively allows passage of karyopherin-bound cargo while excluding non-specific diffusion.

Beyond transport, NUP62 participates in mitosis, where portions of the nuclear pore disassemble to allow spindle formation and chromosome segregation. Mutations or mislocalization of NUP62 disrupt nuclear-cytoplasmic communication, leading to developmental defects and neurodegeneration. Autoantibodies against NUP62 have been identified in certain autoimmune diseases, reflecting its immunogenicity when nuclear integrity is compromised.

Through its integral role in nuclear transport and cell cycle progression, NUP62 maintains genome organization and communication between nuclear and cytoplasmic compartments. NSJ Bioreagents provides a validated NUP62 antibody optimized for western blot, immunofluorescence, and nuclear envelope imaging, supporting research into nucleocytoplasmic trafficking, mitotic control, and nuclear pore architecture.

For related research into nuclear transport, cellular signaling and the regulation of protein localization, explore our Signal Transduction Antibodies page.

Application Notes

Optimal dilution of the NUP62 Antibody / Nucleoporin 62 Antibody should be determined by the researcher.

Immunogen

E.coli-derived human NUP62 recombinant protein (Position: E404-D522) was used as the immunogen for the NUP62 antibody.

Storage

After reconstitution, the NUP62 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Alternative Names: NUP62 antibody, Nucleoporin 62 antibody, Nuclear pore glycoprotein p62 antibody, Nuclear pore complex protein Nup62 antibody, p62 nucleoporin antibody

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