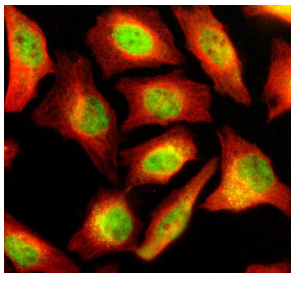
# NUP160 Antibody / Nuclear pore complex protein Nup160 (FY12430)

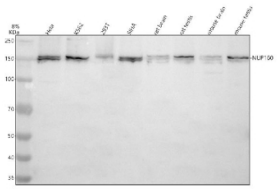
| Catalog No. | Formulation | Size |
|---|---|---|
| FY12430 | Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml | 100 ug |

**Bulk quote request**

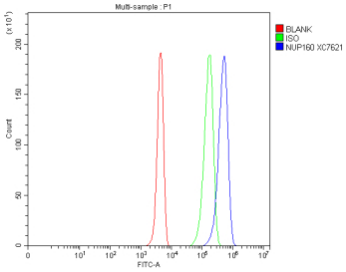
| | |
|---|---|
| **Availability** | 1-2 days |
| **Species Reactivity** | Human, Mouse, Rat |
| **Format** | Lyophilized |
| **Host** | Rabbit |
| **Clonality** | Polyclonal (rabbit origin) |
| **Isotype** | Rabbit IgG |
| **Purity** | Immunogen affinity purified |
| **Buffer** | Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4. |
| **UniProt** | Q12769 |
| **Localization** | Nuclear |
| **Applications** | Western Blot: 0.25-0.5ug/ml<br>Immunocytochemistry/Immunofluorescence: 5ug/ml<br>Flow cytometry: 1-3ug/million cells<br>ELISA: 0.1-0.5ug/ml |
| **Limitations** | This NUP160 antibody is available for research use only. |



Immunofluorescent staining of NUP160 using anti-NUP160 antibody (green) and anti-Beta Tubulin antibody (red). NUP160 was detected in an immunocytochemical section of Hela cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/ml rabbit anti-NUP160 antibody and mouse anti-Beta Tubulin antibody overnight at 4oC. DyLight 488 Conjugated Goat Anti-Rabbit IgG and Cy3 Conjugated Goat Anti-Mouse IgG were used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37oC. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Western blot analysis of NUP160 using anti-NUP160 antibody. Electrophoresis was performed on a 8% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human Hela whole cell lysates, Lane 2: human K562 whole cell lysates, Lane 3: human 293T whole cell lysates, Lane 4: human SIHA whole cell lysates, Lane 5: rat brain tissue lysates, Lane 6: rat testis tissue lysates, Lane 7: mouse brain tissue lysates, Lane 8: mouse testis tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-NUP160 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. NUP160 (~160 kDa predicted) was detected as a doublet near 150â€“160 kDa, consistent with phosphorylation-dependent mobility shifts and isoform variation described for nucleoporins in the nuclear pore complex.




Flow Cytometry analysis of 293T cells using anti-NUP160 antibody. Overlay histogram showing 293T cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-NUP160 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

## Description

The NUP160 antibody targets Nuclear pore complex protein Nup160, a large scaffold protein encoded by the NUP160 gene. Nuclear pore complex protein Nup160 is an essential component of the Nup107-160 subcomplex that forms the structural framework of the nuclear pore complex (NPC). This complex regulates bidirectional transport of macromolecules between the nucleus and cytoplasm, controlling RNA export, protein import, and cell-cycle progression. The NUP160 antibody provides researchers with a robust reagent for studying nucleocytoplasmic transport, nuclear envelope assembly, and the architecture of the NPC.

Nuclear pore complex protein Nup160 contributes to the assembly and stability of the Nup107-160 complex, which includes Nup107, Nup133, Nup96, and Sec13. It localizes to both the cytoplasmic and nucleoplasmic faces of the nuclear envelope and interacts with importins, exportins, and Ran GTPase to regulate nuclear transport. The NUP160 antibody enables detection of this scaffold protein in isolated nuclei and cultured cells, revealing how changes in NPC composition affect molecular trafficking.

Beyond transport, Nuclear pore complex protein Nup160 plays key roles in mitosis. During cell division, the Nup107-160 complex redistributes to kinetochores, where it assists in spindle assembly and chromosome segregation. The NUP160 antibody supports visualization of these dynamic localization patterns, helping clarify the interface between nuclear pore biology and mitotic regulation. Disruption of NUP160 expression or function leads to nuclear envelope defects, delayed cell-cycle progression, and genomic instability.

Mutations in NUP160 have been linked to steroid-resistant nephrotic syndrome and immune dysregulation, reflecting the importance of intact nuclear transport in tissue homeostasis. The NUP160 antibody is used in studies of nuclear pore-related diseases, including autoimmune and neurodegenerative conditions. Reduced expression or structural alteration of Nup160 can also influence viral nuclear import and cellular stress responses.

The NUP160 antibody performs effectively in western blotting, immunofluorescence, and immunohistochemistry, yielding

strong nuclear envelope staining consistent with pore complex localization. NSJ Bioreagents provides this antibody as a validated, high-specificity reagent for use in cell biology, molecular genetics, and structural research. By enabling precise detection of Nuclear pore complex protein Nup160, the NUP160 antibody advances understanding of nuclear transport regulation, pore architecture, and the cellular responses governed by NPC function.

## Application Notes

Optimal dilution of the NUP160 antibody should be determined by the researcher.

## Immunogen

E.coli-derived human NUP160 recombinant protein (Position: E880-K1364) was used as the immunogen for the NUP160 antibody.

## Storage

After reconstitution, the NUP160 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.


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