

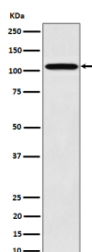
NUP107 Antibody / Nucleoporin 107 [clone 29N68] (FY12917)

Catalog No.	Formulation	Size
FY12917	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

Recombinant **RABBIT MONOCLONAL**

[Bulk quote request](#)

Availability	2-3 weeks
Species Reactivity	Human
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	29N68
Purity	Affinity chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	P57740
Applications	Western Blot : 1:500-1:2000
Limitations	This NUP107 antibody is available for research use only.



Western blot analysis of Nup107 expression in human 293 cell lysate using NUP107 antibody. Expected molecular weight ~107 kDa.

Description

NUP107 antibody detects Nuclear pore complex protein Nup107, encoded by the NUP107 gene. Nup107 is a core scaffold protein of the nuclear pore complex, the large multiprotein structure that spans the nuclear envelope and mediates nucleocytoplasmic transport. This protein is part of the Nup107 160 subcomplex, which is required for nuclear pore assembly, maintenance, and cell cycle regulated dynamics. NUP107 antibody enables detection of this essential nuclear pore component in studies of transport, nuclear envelope biology, and cell cycle control.

Nuclear pore complex protein Nup107 participates in the bidirectional transport of macromolecules, including mRNA, ribonucleoproteins, and proteins with nuclear localization or export signals. The Nup107 complex acts as a scaffold for pore assembly and contributes to nuclear envelope reformation after mitosis. Research using NUP107 antibody has revealed that disruption of this subunit leads to defective pore assembly, impaired nucleocytoplasmic trafficking, and cell cycle arrest. Its fundamental role in nuclear structure makes it indispensable for normal cell physiology.

Mutations or reduced expression of NUP107 have been linked to human disease, particularly nephrotic syndrome and premature ovarian failure. These conditions arise from defective nuclear pore assembly, underscoring the importance of this protein in development and tissue homeostasis. Studies with NUP107 antibody have also associated its dysfunction with cancers, where altered transport may affect oncogene regulation and DNA repair pathways. By examining Nup107 expression, researchers can better understand how nuclear pore biology intersects with human disease.

NUP107 antibody is suitable for western blotting, immunofluorescence, and immunohistochemistry. Western blotting reveals protein levels in dividing cells, while immunofluorescence shows localization at the nuclear envelope throughout interphase and redistribution during mitosis. Immunohistochemistry highlights expression in kidney, ovary, and other tissues affected by Nup107 mutations. These applications demonstrate the utility of NUP107 antibody in diverse cell biology and pathology research.

By supplying validated NUP107 antibody reagents, NSJ Bioreagents enables investigation of nuclear pore biology, transport mechanisms, and disease associated defects. Detection of Nuclear pore complex protein Nup107 provides a critical means of understanding how nuclear transport supports cellular life and contributes to pathology when disrupted.

Application Notes

Optimal dilution of the NUP107 antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Nup107 was used as the immunogen for the NUP107 antibody.

Storage

Store the NUP107 antibody at -20oC.