

# NUP153 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9116a

## **Product Information**

Application	WB, FC, E
Primary Accession	<u>P49790</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB17477
Calculated MW	153938
Antigen Region	58-86

#### **Additional Information**

Gene ID	9972
Other Names	Nuclear pore complex protein Nup153, 153 kDa nucleoporin, Nucleoporin Nup153, NUP153
Target/Specificity	This NUP153 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 58-86 amino acids from the N-terminal region of human NUP153.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NUP153 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **Protein Information**

Name	NUP153
Function	Component of the nuclear pore complex (NPC), a complex required for the trafficking across the nuclear envelope. Functions as a scaffolding element in the nuclear phase of the NPC essential for normal nucleocytoplasmic transport of proteins and mRNAs. Involved in the quality control and

	retention of unspliced mRNAs in the nucleus; in association with TPR, regulates the nuclear export of unspliced mRNA species bearing constitutive transport element (CTE) in a NXF1- and KHDRBS1-independent manner. Mediates TPR anchoring to the nuclear membrane at NPC. The repeat-containing domain may be involved in anchoring other components of the NPC to the pore membrane. Possible DNA-binding subunit of the nuclear pore complex (NPC).
Cellular Location	Nucleus. Nucleus membrane. Nucleus, nuclear pore complex. Note=Tightly associated with the nuclear membrane and lamina (By similarity). Localized to the nucleoplasmic side of the nuclear pore complex (NPC) core structure, forming a fibrous structure called the nuclear basket. Dissociates from the NPC structure early during prophase of mitosis. Integrated in the newly assembled nuclear envelope of postmitotic cells early in G1 Colocalized with NUP98 and TPR to the nuclear basket at the nucleoplasmic side of the NPC. Detected in diffuse and discrete intranuclear foci. Remained localized to the nuclear membrane after poliovirus (PV) infection. Colocalizes with NUP210L at the nuclear periphery in round spermatids and at the caudal extremity in elongating spermatids (PubMed:38129135). {ECO:0000250, ECO:0000269 PubMed:38129135}

## Background

Nuclear pore complexes are extremely elaborate structures that mediate the regulated movement of macromolecules between the nucleus and cytoplasm. These complexes are composed of at least 100 different polypeptide subunits, many of which belong to the nucleoporin family. Nucleoporins are pore complex-specific glycoproteins characterized by cytoplasmically oriented O-linked N-acetylglucosamine residues and numerous repeats of the pentapeptide sequence XFXFG. This protein has three distinct domains: a N-terminal region within which a pore targeting domain has been identified, a central region containing multiple zinc finger motifs, and a C-terminal region containing multiple XFXFG repeats.

#### References

Olsen,J.V., et.al., Cell 127 (3), 635-648 (2006) Ullman,K.S.,et.al., Mol. Biol. Cell 10 (3), 649-664 (1999)

#### Images



Western blot analysis of NUP153 Antibody (N-term) (Cat. #AP9116a) in Hela cell line lysates (35ug/lane). NUP153 (arrow) was detected using the purified Pab.

NUP153 Antibody (N-term)(Cat. #AP9116a) flow cytometry analysis of 293 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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