

NUP153 Antibody (N-term) Blocking Peptide Synthetic peptide Catalog # BP9116a

Specification

NUP153 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>P49790</u>

NUP153 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 9972

Other Names Nuclear pore complex protein Nup153, 153 kDa nucleoporin, Nucleoporin Nup153, NUP153

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP9116a was selected from the N-term region of human NUP153. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NUP153 Antibody (N-term) Blocking Peptide - 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.

NUP153 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

Blocking Peptides

NUP153 Antibody (N-term) Blocking Peptide - Images

NUP153 Antibody (N-term) Blocking Peptide - 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.

NUP153 Antibody (N-term) Blocking Peptide - 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)