

NUP50 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16725c

Product Information

Application	WB, E
Primary Accession	Q9UKX7
Other Accession	NP_009103.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36252
Calculated MW	50144
Antigen Region	224-252

Additional Information

Gene ID	10762
Other Names	Nuclear pore complex protein Nup50, 50 kDa nucleoporin, Nuclear pore-associated protein 60 kDa-like, Nucleoporin Nup50, NUP50, NPAP60L
Target/Specificity	This NUP50 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 224-252 amino acids from the Central region of human NUP50.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	NUP50 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NUP50
Synonyms	NPAP60L
Function	Component of the nuclear pore complex that has a direct role in nuclear

protein import (PubMed:[20016008](#)). Actively displaces NLSs from importin-alpha, and facilitates disassembly of the importin- alpha:beta-cargo complex and importin recycling (PubMed:[20016008](#)). Interacts with regulatory proteins of cell cycle progression including CDKN1B (By similarity). This interaction is required for correct intracellular transport and degradation of CDKN1B (By similarity).

Cellular Location

Nucleus, nuclear pore complex. Nucleus membrane {ECO:0000250|UniProtKB:O08587}; Peripheral membrane protein {ECO:0000250|UniProtKB:O08587}; Nucleoplasmic side {ECO:0000250|UniProtKB:O08587}. Note=Localizes to the nucleoplasmic fibrils of the nuclear pore complex (By similarity). Dissociates from the NPC structure early during prophase of mitosis (PubMed:12802065) Associates with the newly formed nuclear membrane during telophase (PubMed:12802065). In the testis, the localization changes during germ cell differentiation from the nuclear surface in spermatocytes to the whole nucleus (interior) in spermatids and back to the nuclear surface in spermatozoa (By similarity). {ECO:0000250|UniProtKB:O08587, ECO:0000269|PubMed:12802065}

Tissue Location

Ubiquitous. Highest levels in testis, peripheral blood leukocytes and fetal liver

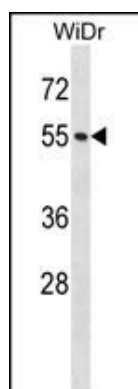
Background

The nuclear pore complex is a massive structure that extends across the nuclear envelope, forming a gateway that regulates the flow of macromolecules between the nucleus and the cytoplasm. Nucleoporins are the main components of the nuclear pore complex in eukaryotic cells. The protein encoded by this gene is a member of the FG-repeat containing nucleoporins that functions as a soluble cofactor in importin-alpha:beta-mediated nuclear protein import. Pseudogenes of this gene are found on chromosomes 5, 6, and 14. Two transcript variants encoding different isoforms have been found for this gene.

References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Ogawa, Y., et al. Mol. Biol. Cell 21(4):630-638(2010)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)
Olsen, J.V., et al. Cell 127(3):635-648(2006)
Beausoleil, S.A., et al. Nat. Biotechnol. 24(10):1285-1292(2006)

Images



NUP50 Antibody (Center) (Cat. #AP16725c) western blot analysis in WiDr cell line lysates (35ug/lane). This demonstrates the NUP50 antibody detected the NUP50 protein (arrow).