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NUP50 Antibody (ascites)

Mouse Monoclonal Antibody (Mab)
Catalog # AM1921a

Product Information

Application	WB, E
Primary Accession	Q9UKX7
Other Accession	NP_009103.2
Reactivity	Human
Predicted	Rat, Bovine, Canine, Rabbit
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Clone Names	247CT10.2.5
Calculated MW	50144

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 monoclonal antibody is generated from mouse immunized with NUP50 recombinant protein.
Dilution	WB~~1:1000~3200 E~~Use at an assay dependent concentration.
Format	Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.
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 (ascites) 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

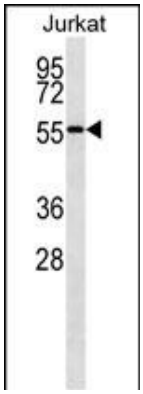
Background

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 (Cat. #AM1921a) western blot analysis in Jurkat cell line lysates (35µg/lane).This demonstrates the NUP50 antibody detected the NUP50 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.