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NUP50 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP1913a

Specification

NUP50 Antibody (Center) Blocking Peptide - Product Information

Primary Accession	Q9UKX7
Other Accession	Q8N6V5

NUP50 Antibody (Center) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP1913a was selected from the Center region of human NUP50. 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.

NUP50 Antibody (Center) Blocking Peptide - 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

NUP50 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

NUP50 Antibody (Center) Blocking Peptide - Images

NUP50 Antibody (Center) Blocking Peptide - 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. NUP50 is a member of the FG-repeat containing nucleoporins that functions as a soluble cofactor in importin-alpha:beta-mediated nuclear protein import. NUP50 may serve as a binding site on the nuclear side of the pore complex for export receptor-cargo complexes. It interacts with multiple transport receptor proteins including p27Kip1. This interaction is required for correct intracellular transport and degradation of p27Kip1.

NUP50 Antibody (Center) Blocking Peptide - References

Lindsay, M.E., et al., Cell 110(3):349-360 (2002).Swaminathan, S., et al., Dev. Cell 3(3):304-306 (2002).Smitherman, M., et al., Mol. Cell. Biol. 20(15):5631-5642 (2000).Guan, T., et al., Mol. Cell. Biol. 20(15):5619-5630 (2000).Collins, J.E., et al., Genome Biol. 5 (10), R84 (2004) (): ().