

## **NUP50 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16725c

### **Specification**

# **NUP50 Antibody (Center) - Product Information**

**Application** WB,E **Primary Accession 09UKX7** NP 009103.2 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 50144 Antigen Region 224-252

### **NUP50 Antibody (Center) - 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.

# **NUP50 Antibody (Center) - 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:008587, ECO:0000269|PubMed:12802065}

#### **Tissue Location**

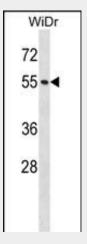
Ubiquitous. Highest levels in testis, peripheral blood leukocytes and fetal liver

# **NUP50 Antibody (Center) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### **NUP50** Antibody (Center) - 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).



# **NUP50 Antibody (Center) - 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.

# **NUP50 Antibody (Center) - 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)