

**NUP50 Antibody (C-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1913b****Specification**

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**NUP50 Antibody (C-term) - Product Information**

|                   |                                                                          |
|-------------------|--------------------------------------------------------------------------|
| Application       | WB,E                                                                     |
| Primary Accession | <a href="#">O9UKX7</a>                                                   |
| Other Accession   | <a href="#">O08587</a> , <a href="#">O9JIH2</a> , <a href="#">Q8N6V5</a> |
| Reactivity        | Human, Mouse                                                             |
| Predicted         | Rat                                                                      |
| Host              | Rabbit                                                                   |
| Clonality         | Polyclonal                                                               |
| Isotype           | Rabbit IgG                                                               |
| Calculated MW     | 50144                                                                    |
| Antigen Region    | 432-461                                                                  |

**NUP50 Antibody (C-term) - 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 432-461 amino acids from the C-terminal 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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**NUP50 Antibody (C-term) - 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

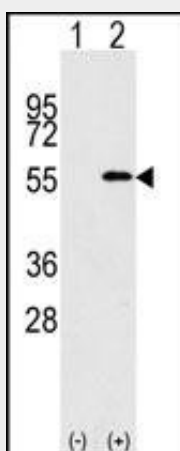
Ubiquitous. Highest levels in testis, peripheral blood leukocytes and fetal liver

## NUP50 Antibody (C-term) - Protocols

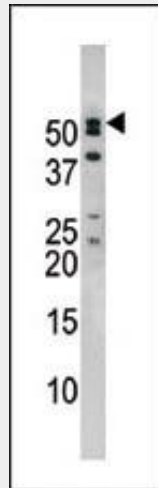
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## NUP50 Antibody (C-term) - Images



Western blot analysis of NUP50 (arrow) using rabbit polyclonal NUP50 Antibody (C-term) (RB08362). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the NUP50 gene (Lane 2) (Origene Technologies).



Western blot analysis of anti-NUP50 Pab (Cat. #AP1913b) in mouse brain tissue lysate. NUP50 (arrow) was detected using the purified Pab.

#### **NUP50 Antibody (C-term) - 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 (C-term) - 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) ( ): ( ).