10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Goat Anti-Npap60 / Nup50 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1742a

Specification

Goat Anti-Npap60 / Nup50 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	Q9UKX7
Other Accession	NP_705931, 10762, 18141 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**50144**

Goat Anti-Npap60 / Nup50 Antibody - 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

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Npap60 / Nup50 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Npap60 / Nup50 Antibody - 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}

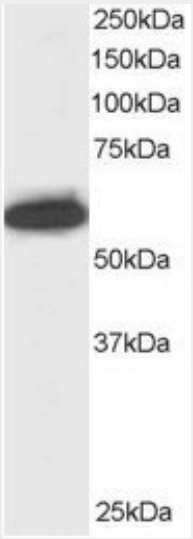
Tissue Location
Ubiquitous. Highest levels in testis, peripheral blood leukocytes and fetal liver

Goat Anti-Npap60 / Nup50 Antibody - Protocols

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

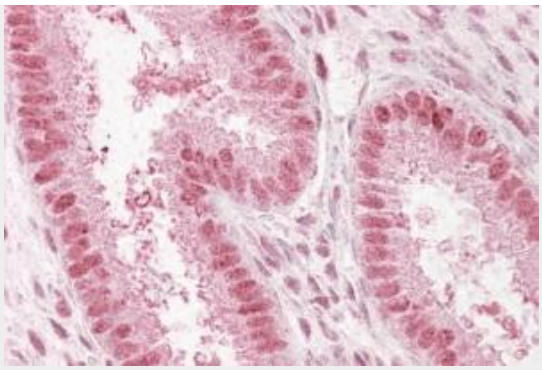
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Npap60 / Nup50 Antibody - Images



AF1742a staining (0.5 µg/ml) of Jurkat lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



AF1742a (3.8 µg/ml) staining of paraffin embedded Human Uterus. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-Npap60 / Nup50 Antibody - 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.

Goat Anti-Npap60 / Nup50 Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.
Two isoforms of Npap60 (Nup50) differentially regulate nuclear protein import. Ogawa Y, et al. Mol Biol Cell, 2010 Feb 15. PMID 20016008.
Mammalian BTBD12/SLX4 assembles a Holliday junction resolvase and is required for DNA repair. Svendsen JM, et al. Cell, 2009 Jul 10. PMID 19596235.
Global, in vivo, and site-specific phosphorylation dynamics in signaling networks. Olsen JV, et al. Cell, 2006 Nov 3. PMID 17081983.
A probability-based approach for high-throughput protein phosphorylation analysis and site localization. Beausoleil SA, et al. Nat Biotechnol, 2006 Oct. PMID 16964243.