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KPNA5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP19166A

Specification

KPNA5 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	O15131
Other Accession	Q56R16, Q503E9, NP_002260.2
Reactivity	**Human**
Predicted	**Zebrafish, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**60666**
Antigen Region	**1-30**

KPNA5 Antibody (N-term) - Additional Information

Gene ID 3841

Other Names
Importin subunit alpha-6, Karyopherin subunit alpha-5, KPNA5

Target/Specificity
This KPNA5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human KPNA5.

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
KPNA5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KPNA5 Antibody (N-term) - Protein Information

Name KPNA5 (HGNC:6398)

Function Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. Binds specifically and directly to substrates containing either a simple or bipartite NLS motif. Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus. Mediates nuclear import of STAT1 homodimers and STAT1/STAT2 heterodimers by recognizing non-classical NLSs of STAT1 and STAT2 through ARM repeats 8-9. Recognizes influenza A virus nucleoprotein through ARM repeat 7-9 In vitro, mediates the nuclear import of human cytomegalovirus UL84 by recognizing a non-classical NLS.

Cellular Location
Cytoplasm.

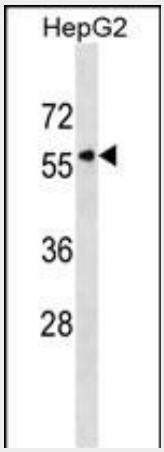
Tissue Location
Testis.

KPNA5 Antibody (N-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 Cytomety
- Cell Culture

KPNA5 Antibody (N-term) - Images



KPNA5 Antibody (N-term) (Cat. #AP19166a) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the KPNA5 antibody detected the KPNA5 protein (arrow).

KPNA5 Antibody (N-term) - Background

The transport of molecules between the nucleus and the cytoplasm in eukaryotic cells is mediated by the nuclear pore complex (NPC) which consists of 60-100 proteins and is probably 120 million daltons in molecular size. Small molecules (up to 70 kD) can pass through the nuclear pore by nonselective diffusion; larger molecules are transported by an active process. Most nuclear proteins contain short basic amino acid sequences known as nuclear localization signals (NLSs). KPNA5 protein belongs to the importin alpha protein family and is thought to be involved in NLS-dependent protein import into the nucleus.

KPNA5 Antibody (N-term) - References

Yang, S.N., et al. J. Biol. Chem. 285(26):19935-19946(2010)
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Lamesch, P., et al. Genomics 89(3):307-315(2007)
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Sekimoto, T., et al. EMBO J. 23(9):1934-1942(2004)