

Rabbit KPNA4 Polyclonal Antibody | anti-KPNA4 antibody

KPNA4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326523	Rabbit	Human, Mouse, Rat	ELISA, Immunohistochemistry, Western Blot

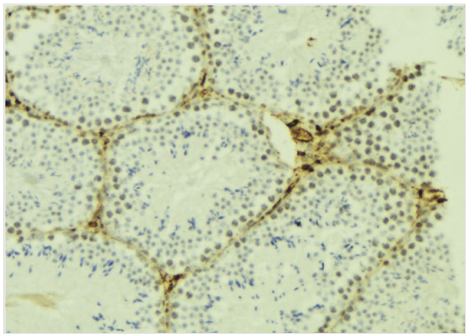
PRODUCT SYNONYMS

KPNA4; Polyclonal Antibody; KPNA4 Antibody; FLJ31113; IMA3_HUMAN; Importin alpha 3; Importin alpha 4 subunit; Importin alpha Q1; Importin subunit alpha 3; Importin subunit alpha-3; IPO A3; IPOA 3; IPOA3; Karyopherin alpha 4 (importin alpha 3); Karyopherin alpha 4; Karyopherin alpha 4 importin alpha 3; Karyopherin alpha 4 subunit; Karyopherin subunit alpha 4; Karyopherin subunit alpha-4; KPNA 4; Kpna4; MGC12217; MGC26703; OTTHUMP00000213880; QIP 1; Qip1; Qip1 protein; SRP 3; SRP3; anti-KPNA4 antibody

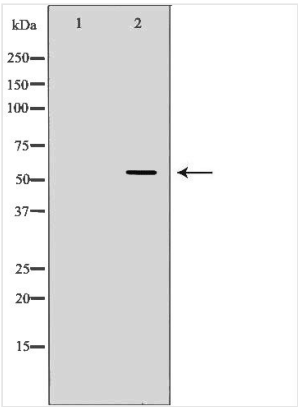
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	KPNA4 antibody detects endogenous levels of total KPNA4
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	521
Applicable Applications for anti-KPNA4 antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human KPNA4
Subcellular Location	Cytoplasm. Nucleus.
Tissue Specificity	Highly expressed in testis, ovary, small intestine, heart, skeletal muscle, lung and pancreas, but barely detectable in kidney, thymus, colon and peripheral blood leukocytes.
Predicted Cross Reactivity	Pig, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (90%), Xenopus (90%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IHC (Immunohistochemistry)
AAA326523 at 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of Hela whole cell lysates, using KPNA4 Antibody. The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-KPNA4 antibody

Description: The nuclear import of karyophilic proteins is directed by short amino acid sequences termed nuclear localization signals (NLSs). Karyopherins, or importins, are cytoplasmic proteins that recognize NLSs and dock NLS-containing proteins to the nuclear pore complex. The protein encoded by this gene shares the sequence similarity with *Xenopus* importin-alpha and *Saccharomyces cerevisiae* Srp1. This protein is found to interact with the NLSs of DNA helicase Q1 and SV40 T antigen.

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. In vitro, mediates the nuclear import of human cytomegalovirus UL84 by recognizing a non-classical NLS. In vitro, mediates the nuclear import of human cytomegalovirus UL84 by recognizing a non-classical NLS.

Subunit Structure: Forms a complex with importin subunit beta-1. Interacts with SNAI1. Interacts with human adenovirus 5 E1A protein; this interaction allows E1A import into the host nucleus (PubMed:23864635).

Similarity: Consists of an N-terminal hydrophilic region, a hydrophobic central region composed of 10 repeats, and a short hydrophilic C-terminus. The N-terminal hydrophilic region contains the importin beta binding domain (IBB domain), which is sufficient for binding importin beta and essential for nuclear protein import. The IBB domain is thought to act as an intrasteric autoregulatory sequence by interacting with the internal autoinhibitory NLS. Binding of KPNB1 probably overlaps the internal NLS and contributes to a high affinity for cytoplasmic NLS-containing cargo substrates. After dissociation of the importin/substrate complex in the nucleus the internal autoinhibitory NLS contributes to a low affinity for nuclear NLS-containing proteins (By similarity). The major and minor NLS binding sites are mainly involved in recognition of simple or bipartite NLS motifs. Structurally located within in a helical surface groove they contain several conserved Trp and Asn residues of the corresponding third helices (H3) of ARM repeats which mainly contribute to binding (By similarity). Belongs to the importin alpha family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504901
NCBI GeneID	3840
NCBI Accession #	NP_002259.1
NCBI GenBank Nucleotide #	NM_002268.4
UniProt Accession #	O00629; O00190; A8K4S6; D3DNM2

Molecular Weight	Observed: 57 kDa Predicted: 58 kDa
NCBI Official Full Name	importin subunit alpha-3
NCBI Official Synonym Full Names	karyopherin subunit alpha 4
NCBI Official Symbol	KPNA4
NCBI Official Synonym Symbols	QIP1; SRP3; IPOA3
NCBI Protein Information	importin subunit alpha-3
UniProt Protein Name	Importin subunit alpha-3
UniProt Gene Name	KPNA4
UniProt Synonym Gene Names	QIP1; Qip1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/kpna4-antibody-immunohistochemistry-western-blot-elisa/326523>