

QIP1 / KPNA4 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS13996**Specification**

QIP1 / KPNA4 Antibody (N-Terminus) - Product Information

Application	ICC, IF, WB, IHC
Primary Accession	O00629
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58kDa KDa

QIP1 / KPNA4 Antibody (N-Terminus) - Additional Information**Gene ID** 3840**Other Names**

Importin subunit alpha-3, Importin alpha Q1, Qip1, Karyopherin subunit alpha-4, KPNA4, QIP1

Target/Specificity

Human KPNA4

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

QIP1 / KPNA4 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

QIP1 / KPNA4 Antibody (N-Terminus) - Protein Information**Name** KPNA4**Synonyms** QIP1**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.

Cellular Location

Cytoplasm. Nucleus.

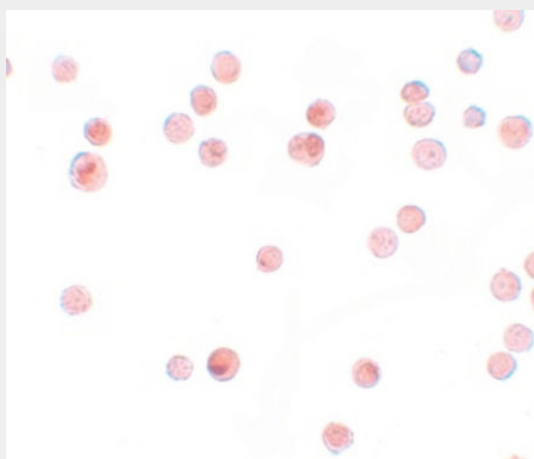
Tissue Location

Highly expressed in testis, ovary, small intestine, heart, skeletal muscle, lung and pancreas, but barely detectable in kidney, thymus, colon and peripheral blood leukocytes

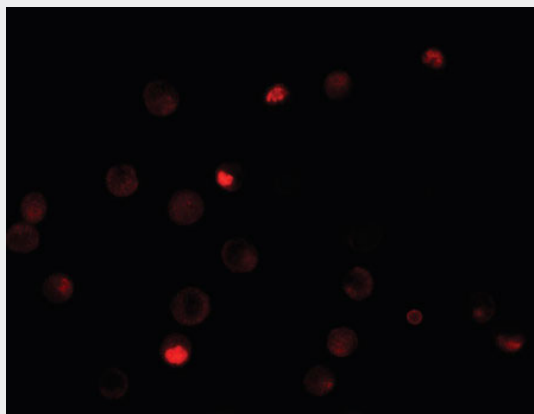
QIP1 / KPNA4 Antibody (N-Terminus) - Protocols

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

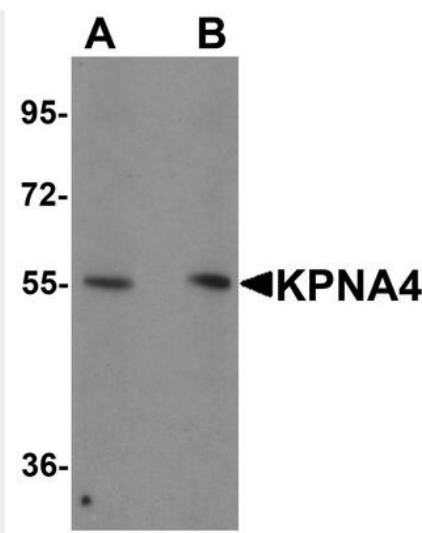
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

QIP1 / KPNA4 Antibody (N-Terminus) - Images

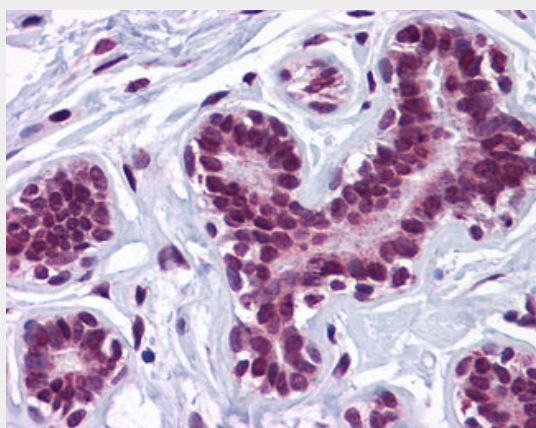
Immunocytochemistry of KPNA4 in HeLa cells with KPNA4 antibody at 2.5 ug/ml.



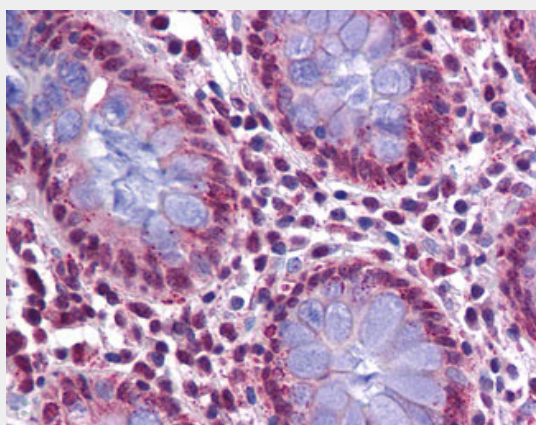
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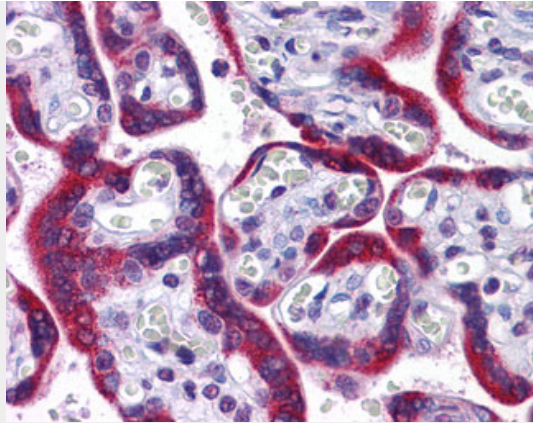
Western blot analysis of KPNA1 in HeLa cell lysate with KPNA1 antibody at 1ug/ml.



Anti-KPNA4 antibody IHC of human breast.



Anti-KPNA4 antibody IHC of human colon.



Anti-KPNA4 antibody IHC of human placenta.

QIP1 / KPNA4 Antibody (N-Terminus) - Background

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.

QIP1 / KPNA4 Antibody (N-Terminus) - References

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Koehler M.,et al.FEBS Lett. 417:104-108(1997).
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