

KPNA3 / Importin Alpha 4 Antibody (C-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS13995**Specification**

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Product Information

Application	ICC, IF, WB, IHC
Primary Accession	O00505
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58kDa KDa

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Additional Information**Gene ID** 3839**Other Names**

Importin subunit alpha-4, Importin alpha Q2, Qip2, Karyopherin subunit alpha-3, SRP1-gamma, KPNA3, QIP2

Target/Specificity

Human KPNA3

Reconstitution & Storage

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

Precautions

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Protein Information**Name** KPNA3**Synonyms** QIP2**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. Recognizes

NLSs of influenza A virus nucleoprotein probably through ARM repeats 7-9.

Cellular Location

Cytoplasm. Nucleus

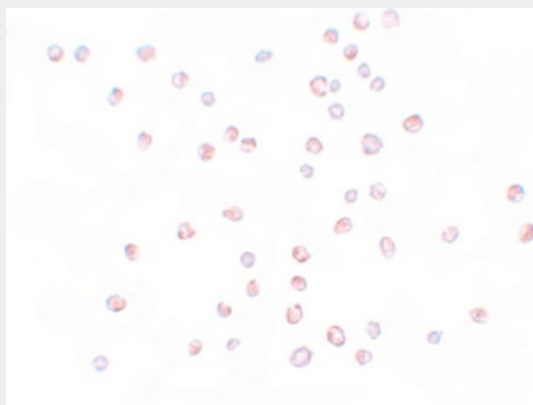
Tissue Location

Ubiquitous. Highest levels in heart and skeletal muscle

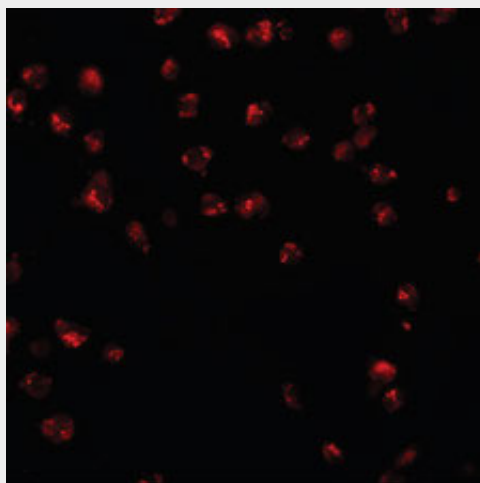
KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Protocols

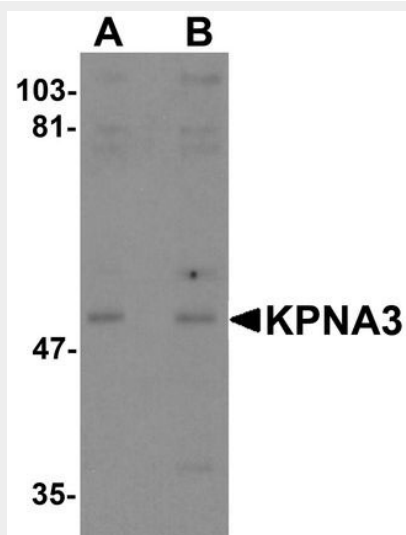
Provided below are standard protocols that you may find useful for product applications.

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

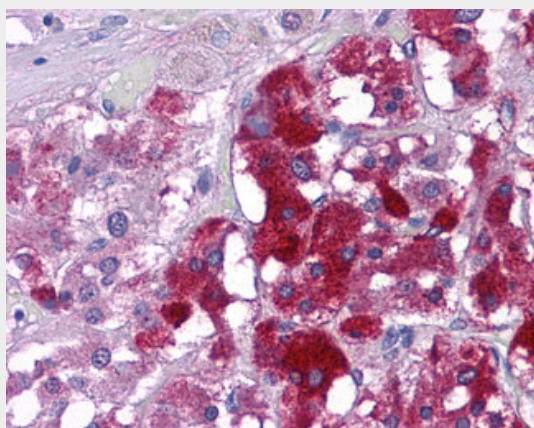
KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Images

Immunocytochemistry of KPNA3 in HeLa cells with KPNA3 antibody at 10 ug/ml.

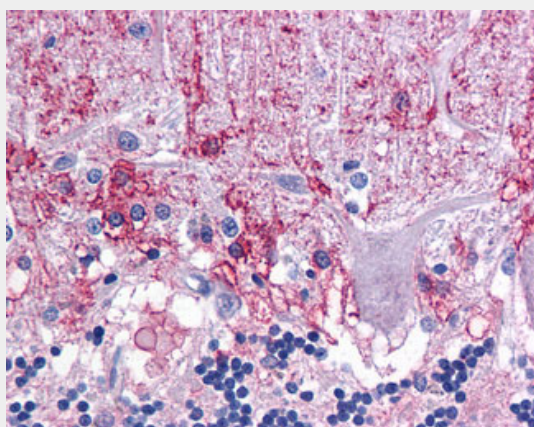




Western blot analysis of KPNA3 in EL4 cell lysate with KPNA3 antibody at (A) 1 and (B) 2 ug/ml.



Anti-KPNA3 antibody IHC of human adrenal.



Anti-KPNA3 antibody IHC of human brain, cerebellum.

KPNA3 / Importin Alpha 4 Antibody (C-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. Recognizes NLSs of influenza A virus nucleoprotein probably through ARM repeats 7-9.

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - References

Takeda S.,et al.Cytogenet. Cell Genet. 76:87-93(1997).
Koehler M.,et al.FEBS Lett. 417:104-108(1997).
Nachury M.V.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:582-587(1998).
Fischer R.,et al.Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).