

KPNA2 / Importin Alpha 1 Antibody (N-Terminus)
Rabbit Polyclonal Antibody
Catalog # ALS13994**Specification**

KPNA2 / Importin Alpha 1 Antibody (N-Terminus) - Product Information

Application	IF, WB, IHC
Primary Accession	P52292
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	58kDa KDa

KPNA2 / Importin Alpha 1 Antibody (N-Terminus) - Additional Information**Gene ID** 3838**Other Names**

Importin subunit alpha-1, Karyopherin subunit alpha-2, RAG cohort protein 1, SRP1-alpha, KPNA2, RCH1, SRP1

Target/Specificity

Human KPNA2

Reconstitution & Storage

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

Precautions

KPNA2 / Importin Alpha 1 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

KPNA2 / Importin Alpha 1 Antibody (N-Terminus) - Protein Information**Name** KPNA2 ([HGNC:6395](#))**Synonyms** RCH1, SRP1**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.

Cellular Location

Cytoplasm. Nucleus

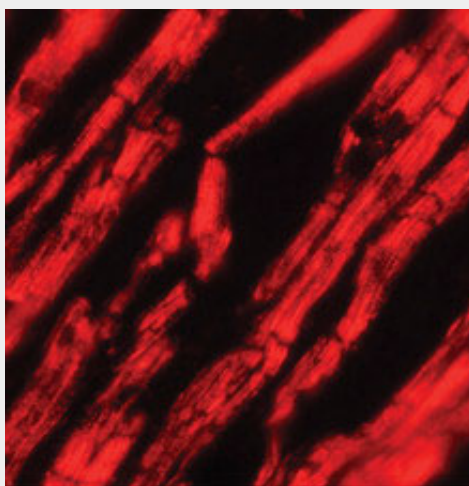
Tissue Location

Expressed ubiquitously.

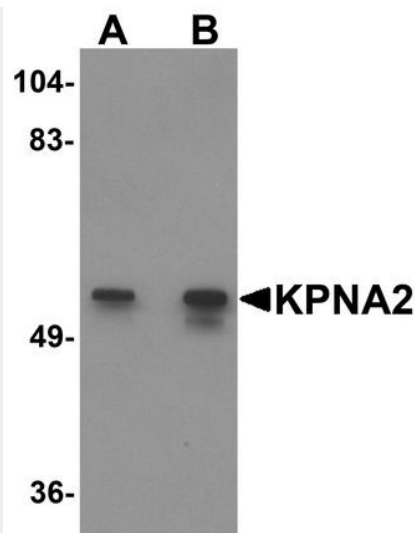
KPNA2 / Importin Alpha 1 Antibody (N-Terminus) - Protocols

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

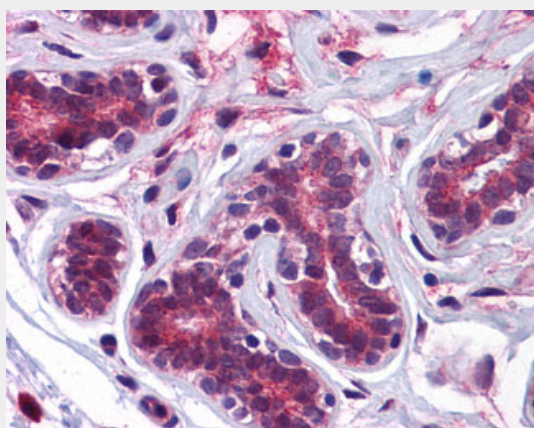
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KPNA2 / Importin Alpha 1 Antibody (N-Terminus) - Images

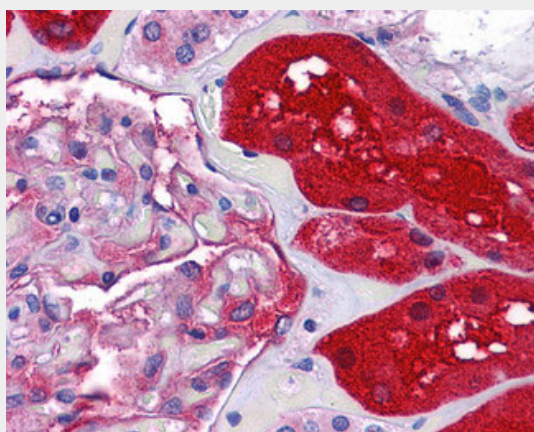
Immunofluorescence of KPNA2 in human heart tissue with KPNA2 antibody at 20 ug/ml.



Western blot analysis of KPNA2 in rat heart tissue lysate with KPNA2 antibody at (A) 1 and (B) 2...



Anti-KPNA2 antibody IHC of human breast.



Anti-KPNA2 antibody IHC of human kidney.

KPNA2 / Importin Alpha 1 Antibody (N-Terminus) - Background

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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.

KPNA2 / Importin Alpha 1 Antibody (N-Terminus) - References

Weis K.,et al.Science 268:1049-1053(1995).
Doerr S.,et al.Hum. Genet. 109:479-486(2001).
Kalnina N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Bienvenut W.V.,et al.Submitted (JUL-2007) to UniProtKB.