

KPNA5 Antibody (N-Terminus)

Rabbit Polyclonal Antibody Catalog # ALS15881

Specification

KPNA5 Antibody (N-Terminus) - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Dilution

WB, IHC-P, IF, ICC, E

O15131

Human, Mouse

Rabbit

Polyclonal

60kDa KDa

WB~~1:1000

IHC-P~~N/A

IF~~1:50~200

ICC~~N/A

E~~N/A

KPNA5 Antibody (N-Terminus) - Additional Information

Gene ID 3841

Other Names

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

Target/Specificity

Human KPNA5. KPNA5 antibody is predicted to not cross-react with other Importin alpha family members.

Reconstitution & Storage

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

Precautions

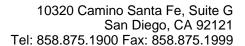
KPNA5 Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

KPNA5 Antibody (N-Terminus) - 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.

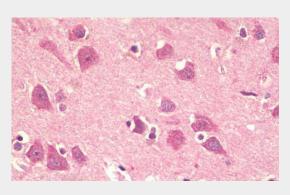
Tissue Location Testis.

KPNA5 Antibody (N-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KPNA5 Antibody (N-Terminus) - Images

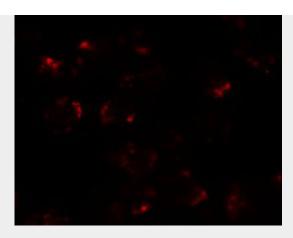


Anti-KPNA5 antibody IHC staining of human brain, cortex.

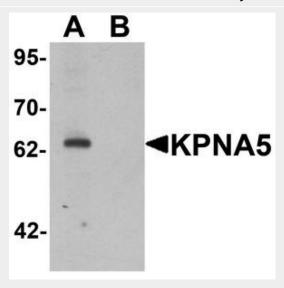


Immunocytochemistry of KPNA5 in EL4 cells with KPNA5 antibody at 5 µg/mL.





Immunofluorescence of KPNA5 in EL4 cells with KPNA5 antibody at 20 µg/mL.



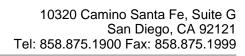
Western blot analysis of KPNA6 in EL4 cell lysate with KPNA5 antibody at 1 ug/ml in (A) the...

KPNA5 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. 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.

KPNA5 Antibody (N-Terminus) - References

Koehler M., et al. FEBS Lett. 417:104-108(1997).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Mungall A.J., et al. Nature 425:805-811(2003).
Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.





Melen K., et al.J. Biol. Chem. 278:28193-28200(2003).