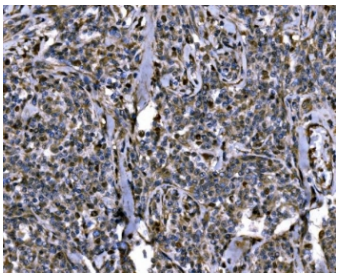
Importin subunit alpha-1 Antibody / KPNA2 (RQ6884)

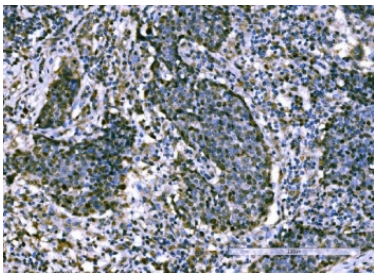
Catalog No.	Formulation	Size
RQ6884	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

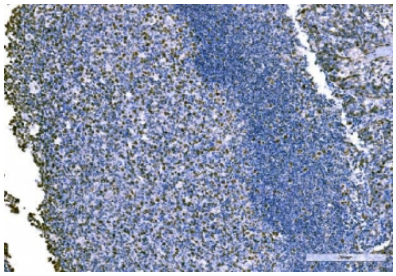
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P52292
Localization	Cytoplasmic, nuclear
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells Direct ELISA: 0.1-0.5ug/ml
Limitations	This Importin subunit alpha-1 antibody is available for research use only.



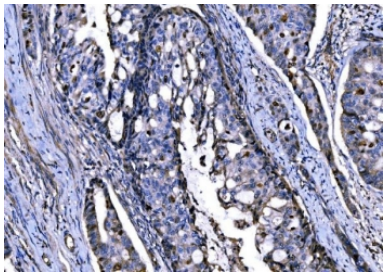
IHC staining of FFPE human lymphoma tissue with Importin subunit alpha-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



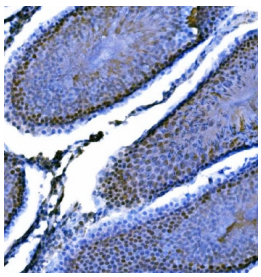
IHC staining of FFPE human lung cancer tissue with Importin subunit alpha-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



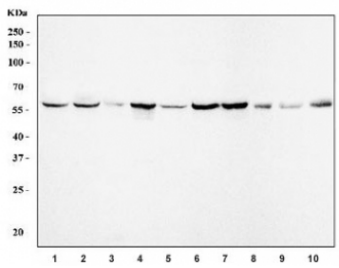
IHC staining of FFPE human tonsil tissue with Importin subunit alpha-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



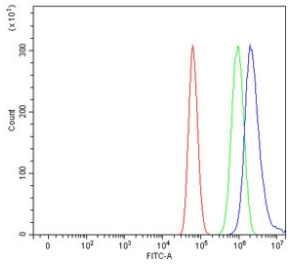
IHC staining of FFPE human adenocarcinoma of the right colon with Importin subunit alpha-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE rat testis with Importin subunit alpha-1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) human A549, 2) human U-251, 3) human U-2 OS, 4) human Daudi, 5) human MCF7, 6) human T-47D, 7) human Caco-2, 8) rat testis, 9) mouse testis and 10) mouse RAW264.7 cell lysate with Importin subunit alpha-1 antibody. Predicted molecular weight ~58 kDa.



Flow cytometry testing of human U-87 MG cells with Importin subunit alpha-1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= Importin subunit alpha-1 antibody.

Description

Importin subunit alpha-1 is a protein that in humans is encoded by the KPNA2 gene. The import of proteins into the nucleus is a process that involves at least 2 steps. The first is an energy-independent docking of the protein to the nuclear envelope and the second is an energy-dependent translocation through the nuclear pore complex. Imported proteins require a nuclear localization sequence (NLS) which generally consists of a short region of basic amino acids or 2 such regions spaced about 10 amino acids apart. Proteins involved in the first step of nuclear import have been identified in different systems. These include the Xenopus protein importin and its yeast homolog, SRP1 (a suppressor of certain temperature-sensitive mutations of RNA polymerase I in Saccharomyces cerevisiae), which bind to the NLS. KPNA2 protein interacts with the NLSs of DNA helicase Q1 and SV40 T antigen and may be involved in the nuclear transport of proteins. KPNA2 also may play a role in V(D)J recombination.

Application Notes

Optimal dilution of the Importin subunit alpha-1 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids R51-F529) was used as the immunogen for the Importin subunit alpha-1 antibody.

Storage

After reconstitution, the Importin subunit alpha-1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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