

Karyopherin α 2 Polyclonal Antibody

Catalog No :	YT5691
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Karyopherin α 2
Fields :	>>Nucleocytoplasmic transport;>>Influenza A;>>Chemical carcinogenesis - receptor activation
Gene Name :	KPNA2
Protein Name :	Importin subunit alpha-2
Human Gene Id :	3838
Human Swiss Prot No :	P52292
Mouse Gene Id :	16647
Mouse Swiss Prot No :	P52293
Immunogen :	Synthesized peptide derived from the N-terminal region of human Karyopherin α 2.
Specificity :	Karyopherin α 2 Polyclonal Antibody detects endogenous levels of Karyopherin α 2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	IHC: 100-300.WB 1:500 - 1:2000. ELISA: 1:10000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 60kD

Background :

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 re

Function :

domain:Consists of an N-terminal hydrophilic region, a hydrophobic central region composed of 10 repeats, and a short hydrophilic C-terminus. The N-terminal hydrophilic region contains the importin beta binding domain (IBB domain), which is sufficient for binding importin beta and essential for nuclear protein import.,domain:The IBB domain is thought to act as an intrasteric autoregulatory sequence by interacting with the internal autoinhibitory NLS. Binding of KPNA1 probably overlaps the internal NLS and contributes to a high affinity for cytoplasmic NLS-containing cargo substrates. After dissociation of the importin/substrate complex in the nucleus the internal autoinhibitory NLS contributes to a low affinity for nuclear NLS-containing proteins.,domain:The major and minor NLS binding sites are mainly involved in recognition of simple or bipartite NLS motifs. Structurally located within i

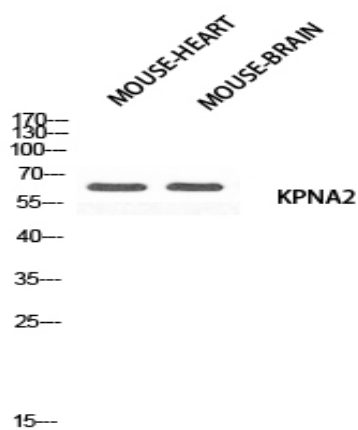
Subcellular Location :

Cytoplasm . Nucleus .; Endoplasmic reticulum membrane. Golgi apparatus membrane . (Microbial infection) Retained in ER/Golgi membranes upon interaction with SARS-COV virus ORF6 protein. .

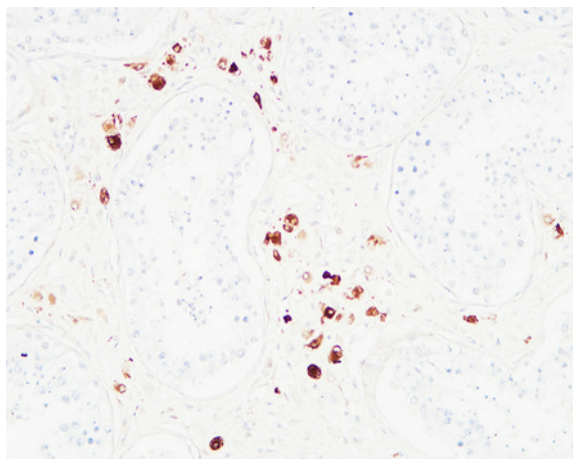
Expression :

Expressed ubiquitously.

Products Images



Western blot analysis of MOUSE-HEART MOUSE-BRAIN using KPNA2 antibody. Antibody was diluted at 1:500. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded Human testis. 1, Antibody was diluted at 1:200(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).