

## Karyopherin $\alpha$ 2 Polyclonal Antibody

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

**Concentration :** 1 mg/ml

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

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**Observed Band :** 60kD

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**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

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**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

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**Subcellular Location :**

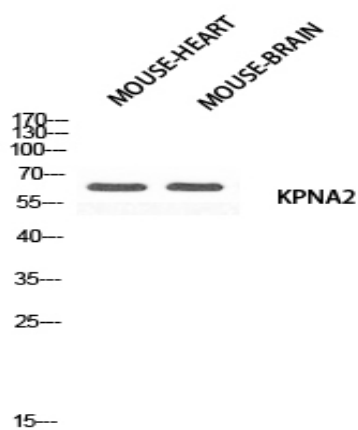
Cytoplasm . Nucleus .; Endoplasmic reticulum membrane. Golgi apparatus membrane . (Microbial infection) Retained in ER/Golgi membranes upon interaction with SARS-COV virus ORF6 protein. .

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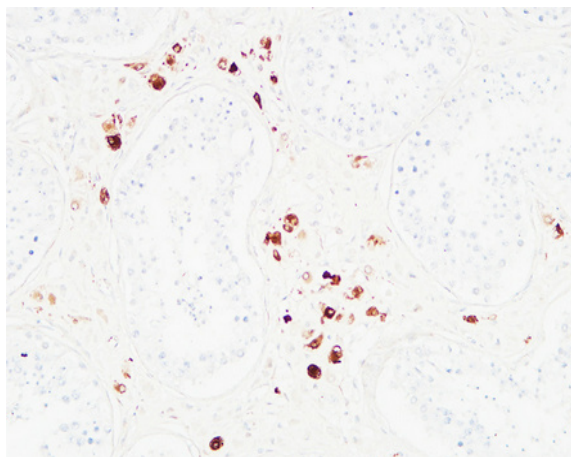
**Expression :** Expressed ubiquitously.

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## 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).