

**Karyopherin  $\alpha$ 2 (Acetyl Lys22) rabbit pAb**

<b>Catalog No :</b>	YK0153
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;ELISA;IHC
<b>Target :</b>	Karyopherin $\alpha$ 2
<b>Fields :</b>	>>Nucleocytoplasmic transport;>>Influenza A;>>Chemical carcinogenesis - receptor activation
<b>Gene Name :</b>	KPNA2 RCH1 SRP1
<b>Protein Name :</b>	Karyopherin $\alpha$ 2 (Acetyl Lys22)
<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 human Karyopherin $\alpha$ 2 (Acetyl Lys22)
<b>Specificity :</b>	This antibody detects endogenous levels of Human,Mouse,Rat Karyopherin $\alpha$ 2 (Acetyl Lys22)
<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>	WB 1:500-2000;IHC 1:50-300; ELISA 2000-20000
<b>Purification :</b>	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
<b>Concentration :</b>	1 mg/ml

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

**Observed Band :** 60kD

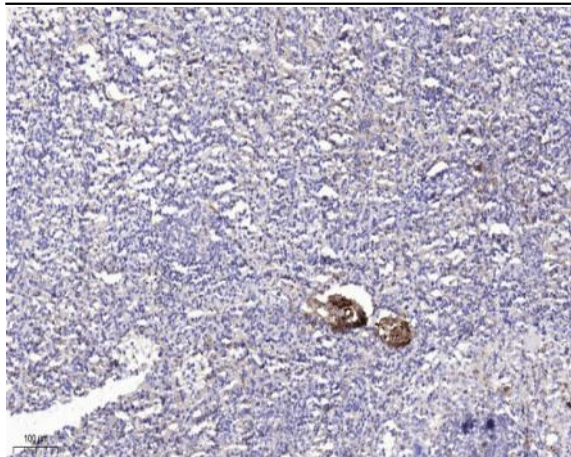
**Background :** The import of proteins into the nucleus is a process that involves at least 2 steps. The first is an energy-independent docking of the protein to the nuclear envelope and the second is an energy-dependent translocation through the nuclear pore complex. Imported proteins require a nuclear 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 KPNB1 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



Immunohistochemical analysis of paraffin-embedded human spleen. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).