Karyopherin α2 (Acetyl Lys22) Rabbit pAb

CatalogNo: YK0153

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,ELISA,IHC

MW
- 60kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-2000
IHC 1:50-300
ELISA 1:2000-20000

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	Synthesized peptide derived from human Karyopherin α2 (Acetyl Lys22)
Specificity	This antibody detects endogenous levels of Human,Mouse,Rat Karyopherin α2 (Acetyl Lys22).The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):KGkDS

Target Information

Gene name KPNA2 RCH1 SRP1

Protein Name Importin subunit alpha-2 (Acetyl Lys22)

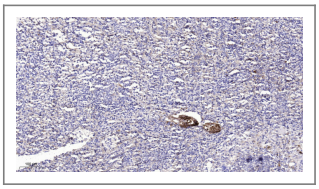
Organism	Gene ID	UniProt ID
Human	3838;	P52292;
Mouse	16647;	P52293;

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

Tissue specificity Expressed ubiquitously.

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 autohibitory 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 in a helical surface groove they contain several conserved Trp and Asn residues of the corresponding third helices (H3) of ARM repeats which mainly contribute to binding.,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.,mass spectrometry: PubMed:11840567,similarity:Belongs to the importin alpha family.,similarity:Contains 1 IBB domain.,similarity:Contains 10 ARM repeats.,subunit:Forms a complex with importin subunit beta-1. Found in a complex with CSE1L/XPO2, Ran and KPNA2. Interacts with CSE1L/XPO2 and NBN. Interacts with ANP32E (By similarity). Interacts with HIV-1 Vpr and PLAG1.,tissue specificity:Expressed ubiquitously.,

Validation Data



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

Contact information

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