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# Karyopherin α2 Polyclonal Antibody

Catalog # AP73874

## Product Information

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|---|---|
| **Application** | WB, IHC-P, IF, ICC, E |
| **Primary Accession** | P52292 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 57862 |

## Additional Information

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| **Gene ID** | 3838 |
| **Other Names** | KPNA2; RCH1; SRP1; Importin subunit alpha-2; Karyopherin subunit alpha-2; RAG cohort protein 1; SRP1-alpha |
| **Dilution** | WB~~IHC-p: 100-300.Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. IHC-P~~IHC-p: 100-300.Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A |
| **Format** | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide. |
| **Storage Conditions** | -20℃ |

## Protein Information

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| **Name** | KPNA2 ( HGNC:6395) |
| **Synonyms** | RCH1, SRP1 |
| **Function** | Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1 (PubMed:28991411, PubMed:32130408, PubMed:7604027, PubMed:7754385). Binds specifically and directly to substrates containing either a simple or bipartite NLS motif (PubMed:28991411, PubMed:32130408, PubMed:7604027, PubMed:7754385). 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 (PubMed:7604027, PubMed:7754385). 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. Mediator of PR-DUB complex component BAP1 nuclear import; acts redundantly with KPNA1 and Transportin-1/TNPO1 (PubMed:35446349).

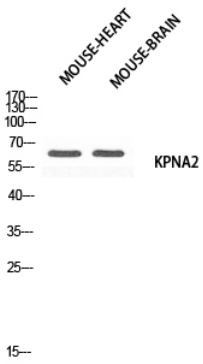
**Cellular Location** Cytoplasm. Nucleus

**Tissue Location** Expressed ubiquitously.

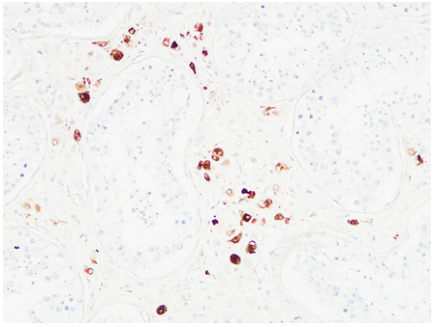
## Background

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.

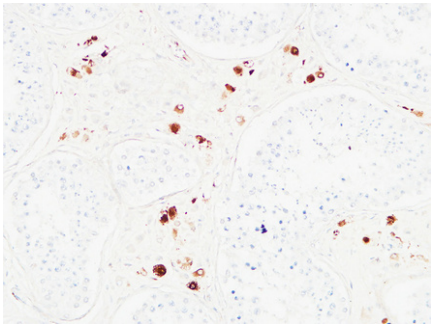
## Images




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



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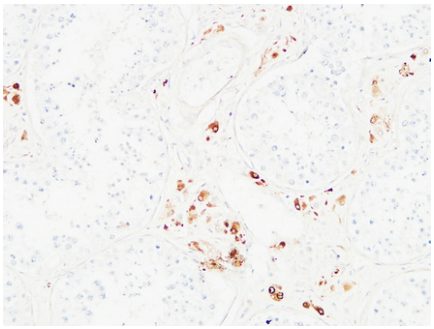

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Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.