

Karyopherin α 2 Polyclonal Antibody
Catalog # AP73874**Specification****Karyopherin α 2 Polyclonal Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	P52292
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

Karyopherin α 2 Polyclonal Antibody - Additional Information**Gene ID** 3838**Other Names**

KPNA2; RCH1; SRP1; Importin subunit alpha-2; Karyopherin subunit alpha-2; RAG cohort protein 1; SRP1-alpha

Dilution

WB~~1:1000

IHC-P~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

Karyopherin α 2 Polyclonal Antibody - Protein Information**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

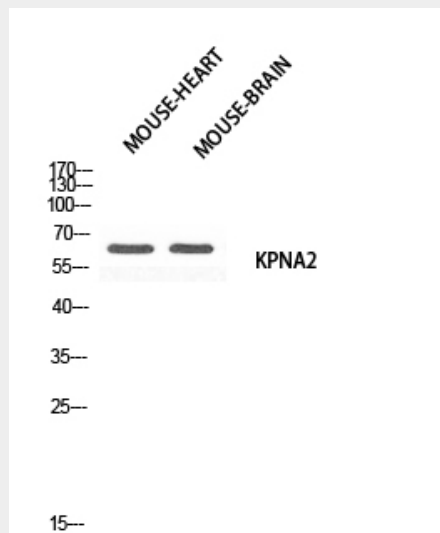
Expressed ubiquitously.

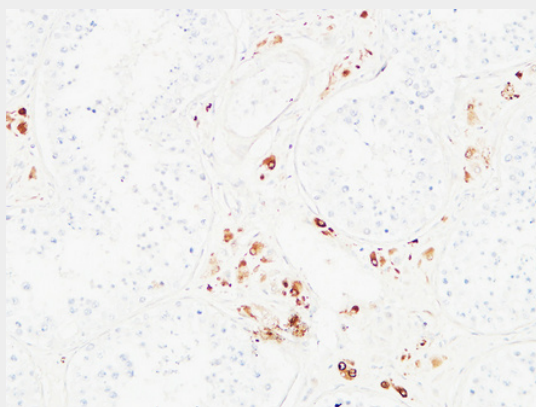
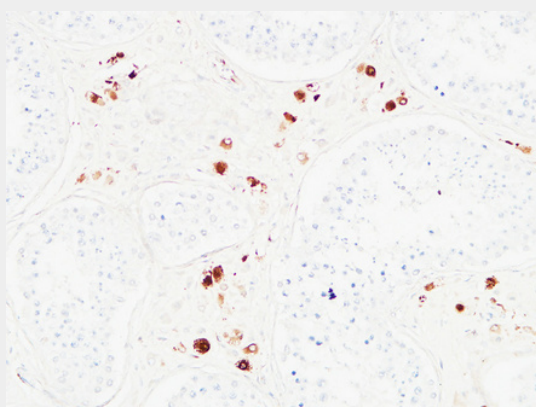
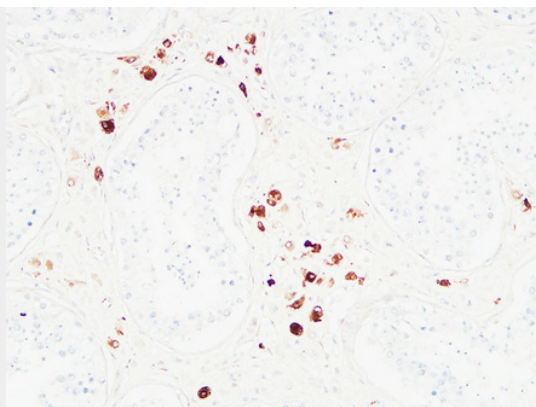
Karyopherin $\alpha 2$ Polyclonal Antibody - Protocols

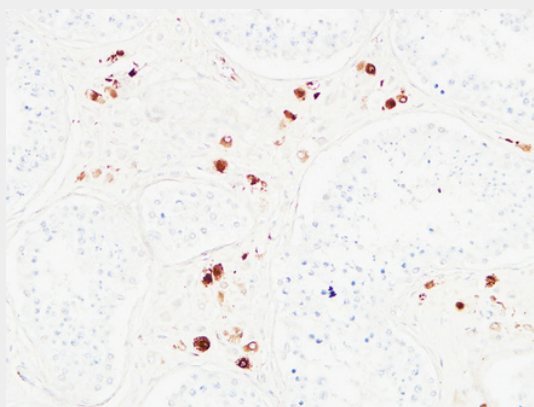
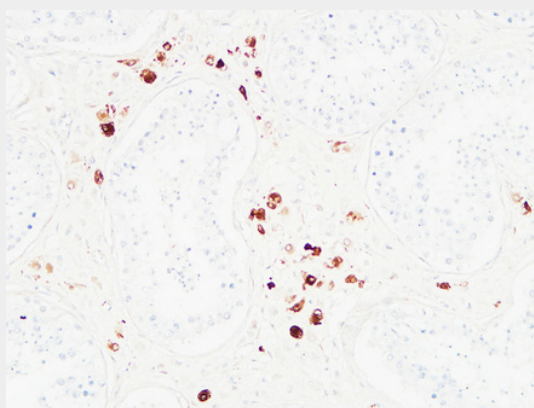
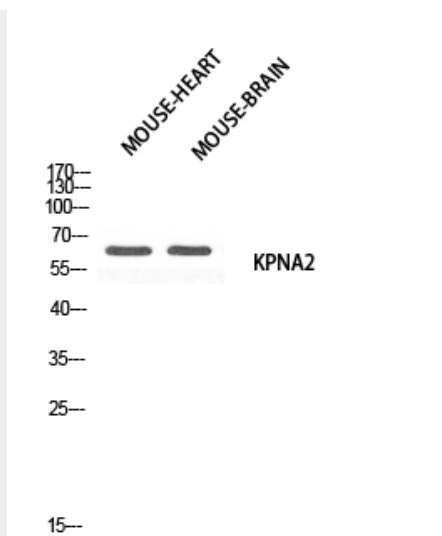
Provided below are standard protocols that you may find useful for product applications.

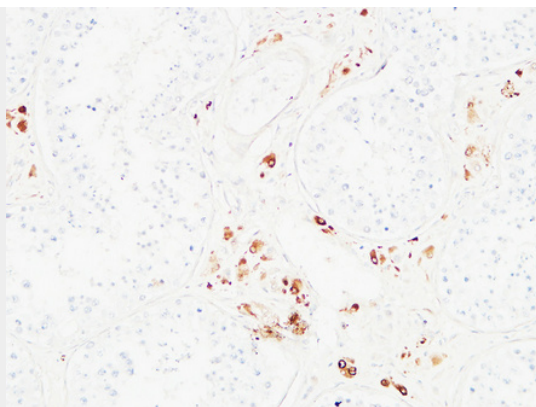
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Karyopherin $\alpha 2$ Polyclonal Antibody - Images









Karyopherin α 2 Polyclonal Antibody - 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.