10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RCH1 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10599

Specification

RCH1 Antibody - Product Information

Application	**WB, IP**
Primary Accession	P52292
Other Accession	NP_002257.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**57862**

RCH1 Antibody - Additional Information

Gene ID 3838

Application & Usage

Western blotting (1:500 – 1:2000) and Immunoprecipitation. However, the optimal concentrations should be determined individually. HeLa cell lysate can be used as a positive control. The antibody recognizes the RCH1 (KPNA2) of human origin. Reactivity to other species has not been tested.

Other Names
RCH1, RAG cohort 1, KPNA2, Karyopherin alpha 2, IPOA1, Importin alpha 2, Pendulin, QIP2, SRP1alpha

Target/Specificity
RCH1

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µl affinity purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 1% BSA and 0.02% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
RCH1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RCH1 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.

RCH1 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 Cytomety

- Cell Culture

RCH1 Antibody - Images

RCH1 Antibody - Background

The import of proteins from the cytoplasm to the nucleus involves docking the protein to receptors associated with the nuclear pore complex followed by translocation through the nuclear pore. RCH1 is an adaptor protein that recognizes the nuclear localization signal (NLS) on cargo and binds the karyopherin importin-beta receptor for nuclear import which is regulated by RanGTP.