

# **KPNA2** Antibody

Rabbit mAb Catalog # AP91640

#### **Product Information**

**Application** WB, FC **Primary Accession** WB, FC

**Reactivity** Rat, Human, Mouse

**Clonality** Monoclonal

Other Names QIP2; RCH1; IPOA1; SRP1alpha;

IsotypeRabbit IgGHostRabbitCalculated MW57862

## **Additional Information**

**Dilution** WB 1:1000~1:5000 FC 1:50 **Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human KPNA2

**Description** 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.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

### **Protein Information**

Name KPNA2 ( HGNC:6395)

Synonyms RCH1, SRP1

**Function** Functions in nuclear protein import as an adapter protein for nuclear

receptor KPNB1 (PubMed:<u>28991411</u>, PubMed:<u>32130408</u>, PubMed:<u>7604027</u>, PubMed:<u>7754385</u>). Binds specifically and directly to substrates containing either a simple or bipartite NLS motif (PubMed:<u>28991411</u>, PubMed:<u>32130408</u>, PubMed:<u>7604027</u>, PubMed:<u>7754385</u>). 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:<u>7604027</u>, PubMed:<u>7754385</u>). 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

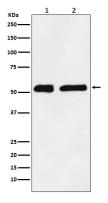
directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm

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.

# **Images**



Western blot analysis of KPNA2 expression in (1) HeLa cell lysate; (2) C6 cell lysate.

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