

Goat anti-KPNA2 / IPOA1, Biotinylated Antibody

Peptide-affinity purified goat antibody Catalog # AF4359a

Product Information

Application WB, IF, Pep-ELISA

Primary Accession P52292
Other Accession NP_002257.1
Reactivity Human
Host Goat
Clonality Polyclonal
Clone Names KPNA2
Calculated MW 57862

Additional Information

Gene ID 3838

Other Names KPNA2; karyopherin alpha 2 (RAG cohort 1, importin alpha 1); IPOA1; QIP2;

RCH1; SRP1alpha; RAG cohort 1; RAG cohort protein 1; SRP1-alpha; importin alpha 1; importin alpha 2; importin subunit alpha-2; importin-alpha-P1;

karyopherin subunit alpha-2; pendul

Dilution WB~~1:1000 IF~~1:50~200 Pep-ELISA~~N/A

Format Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5%

bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and

thawing.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Goat anti-KPNA2 / IPOA1, Biotinylated Antibody is for research use only and

not for use in diagnostic or therapeutic procedures.

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: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.

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