

KD-Validated Anti-Karyopherin subunit alpha 2 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1025**Specification****KD-Validated Anti-Karyopherin subunit alpha 2 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	P52292
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 58 kDa, observed, 58 kDa kDa
Gene Name	KPNA2
Aliases	KPNA2; Karyopherin Subunit Alpha 2; SRP1alpha; PTAC58; IPOA1; QIP2; RCH1; Karyopherin Alpha 2 (RAG Cohort 1, Importin Alpha 1); Nuclear Pore-Targeting Complex 58kD Component; Importin Subunit Alpha-1; RAG Cohort Protein 1; SRP1-Alpha; Karyopherin Subunit Alpha-2; Importin Subunit Alpha-2; Karyopherin Alpha 2; Importin-Alpha-P1; Importin Alpha 1; RAG Cohort 1; Pendulin; SRP1
Immunogen	A synthesized peptide derived from human KPNA2

KD-Validated Anti-Karyopherin subunit alpha 2 Rabbit Monoclonal Antibody - Additional Information

Gene ID 3838

Other Names

Importin subunit alpha-1, Karyopherin subunit alpha-2, RAG cohort protein 1, SRP1-alpha, KPNA2 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=6395 target="_blank">HGNC:6395), RCH1, SRP1

KD-Validated Anti-Karyopherin subunit alpha 2 Rabbit Monoclonal Antibody - Protein InformationName KPNA2 ([HGNC:6395](#))

Synonyms RCH1, SRP1

Function

Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1 (PubMed:<http://www.uniprot.org/citations/28991411> target="_blank">28991411, PubMed:<http://www.uniprot.org/citations/32130408> target="_blank">32130408, PubMed:<http://www.uniprot.org/citations/7604027> target="_blank">7604027, PubMed:<http://www.uniprot.org/citations/7604027> target="_blank">7604027)

[7754385](http://www.uniprot.org/citations/7754385)). Binds specifically and directly to substrates containing either a simple or bipartite NLS motif (PubMed: [28991411](http://www.uniprot.org/citations/28991411), PubMed: [32130408](http://www.uniprot.org/citations/32130408), PubMed: [7604027](http://www.uniprot.org/citations/7604027), PubMed: [7754385](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/7604027), PubMed: [7754385](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/35446349)).

Cellular Location

Cytoplasm. Nucleus

Tissue Location

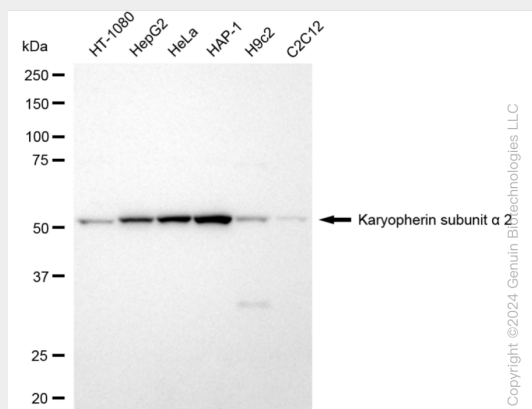
Expressed ubiquitously.

KD-Validated Anti-Karyopherin subunit alpha 2 Rabbit Monoclonal Antibody - Protocols

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

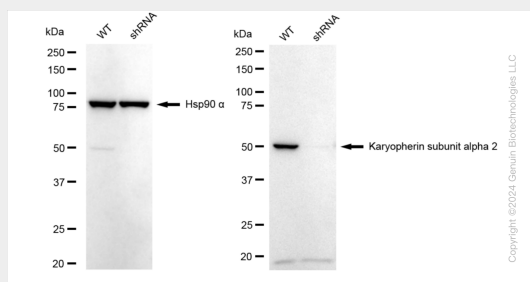
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-Karyopherin subunit alpha 2 Rabbit Monoclonal Antibody - Images

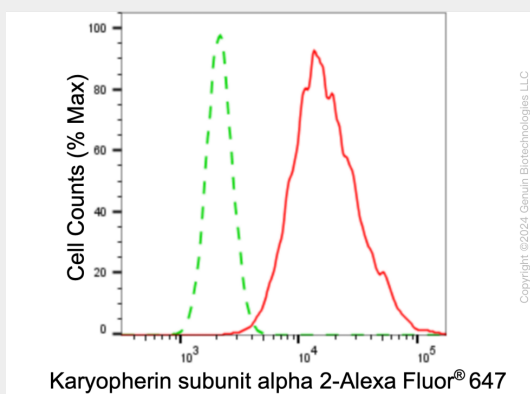


Western blotting analysis using anti-karyopherin subunit alpha 2 antibody (Cat#AGI1025). Total

cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-karyopherin subunit alpha 2 antibody (Cat#AGI1025, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-karyopherin subunit alpha 2 antibody (Cat#AGI1025). Karyopherin subunit alpha 2 expression in wild type (WT) and karyopherin subunit alpha 2 (KPNA2) shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-karyopherin subunit alpha 2 antibody (Cat#AGI1025, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of karyopherin subunit alpha 2 expression in HepG2 cells using karyopherin subunit alpha 2 antibody (Cat#AGI1025, 1:2,000). Green, isotype control; red, karyopherin subunit alpha 2.