

Datasheet for 600-401-CG0**KPNA2 Antibody****Overview**

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| Description: | Anti-KPNA2 (RABBIT) Antibody - 600-401-CG0 |
| Item No.: | 600-401-CG0 |
| Size: | 100 µg |
| Applications: | ELISA, IF, IHC, WB |
| Reactivity: | Human, Mouse, Rat |
| Host Species: | Rabbit |

Product Details

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| Background: | Karyopherin, a cytosolic and heterodimeric protein complex consisting of alpha and beta subunits, is responsible for targeting proteins with nuclear localization signals to the nuclear pore complex by an energy requiring, Ran-dependent mechanism. The alpha subunit and imported substrate enter the nucleus and accumulate in the nucleoplasm, while the beta subunit accumulates at the NPC. KPNA2 is the alpha subunit 2 of karyopherin, which forms a complex with importin subunit beta-1 and functions as a cargo carrier that transports various complexes from cytoplasm into nucleus. It is ubiquitously expressed and contains an IBB/importin beta domain, ten Armadillo repeats that bind "cargo" and three intervening nuclear localization sequences (NLSs). It has recently been reported to play an important role in tumorigenesis and tumor progression. |
| Synonyms: | KPNA2 Antibody, QIP2, RCH1, IPOA1, SRP1alpha, SRP1, Importin subunit alpha-1, Karyopherin subunit alpha-2 |
| Host Species: | Rabbit |
| Clonality: | Polyclonal |
| Format: | IgG |

Target Details

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| Gene Name: | KPNA2 |
| Reactivity: | Human, Mouse, Rat |
| Immunogen Type: | Conjugated Peptide |

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| Immunogen: | Anti-KPNA2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the N-terminus of human KPNA2. |
| Purity/Specificity: | Anti-KPNA2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with KPNA2 from other sources has not been determined. |
| Relevant Links: | <ul style="list-style-type: none">• UniProtKB - P52292• GeneID - 3838• NCBI - NP_002257 |

Application Details

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| Tested Applications: | ELISA, IF, IHC, WB |
| Application Note: | Anti-KPNA2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 58 kDa in Western Blots of specific cell lysates and tissues. |
| Assay Dilutions: | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| ELISA: | 1:10,000 - 1:20,000 |
| IF: | 20 µg/mL |
| IHC: | 5 µg/mL |
| WB: | 1-2 µg/mL |

Formulation

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| Physical State: | Liquid (sterile filtered) |
| Concentration: | 1 mg/mL by UV absorbance at 280 nm |
| Buffer: | 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 |
| Preservative: | 0.02% (w/v) Sodium Azide |
| Stabilizer: | None |

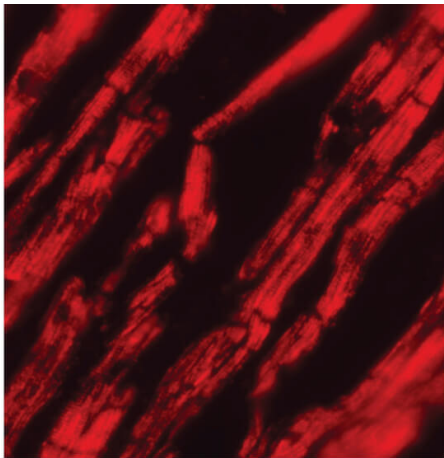
Shipping & Handling

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| Shipping Condition: | Dry Ice |
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

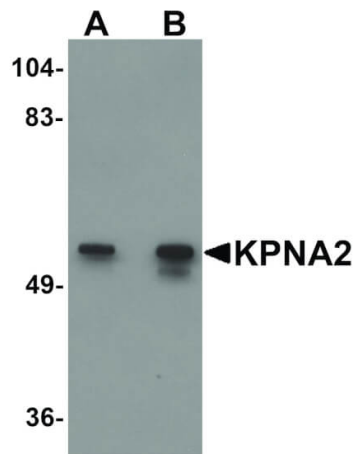
Expiration: Expiration date is one (1) year from date of receipt.

Images



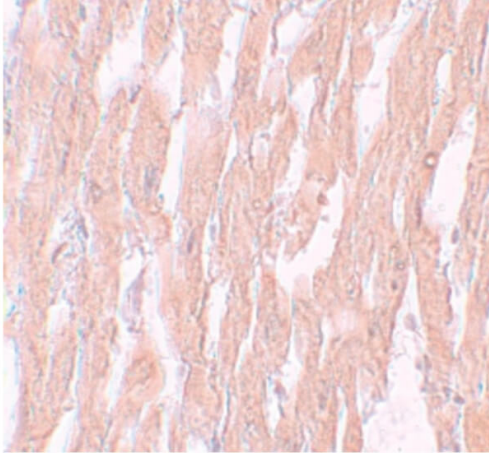
Immunofluorescence Microscopy

Immunofluorescence Microscopy of KPNA2 antibody.
Tissue: Human heart tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: KPNA2 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: KPNA2 is nuclear and cytoplasmic. Staining: KPNA2 as red fluorescent signal.



Western Blot

Western Blot of KPNA2 antibody. Lane 1: Rat heart tissue lysate with KPNA2 antibody at 1 µg/mL. Lane 2: Rat heart tissue lysate with KPNA2 antibody at 2 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 58 kDa, 58 kDa for KPNA2. Other band(s): KPNA2 splice variants and isoforms.

**Immunohistochemistry**

Immunohistochemistry of KPNA2 antibody. Tissue: Human heart tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: KPNA2 antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: KPNA2 is nuclear and cytoplasmic. Staining: KPNA2 as precipitated pink signal with blue counterstain.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.