

Datasheet for 600-401-CF9**KPNA1 Antibody****Overview**

Description:	Anti-KPNA1 (RABBIT) Antibody - 600-401-CF9
Item No.:	600-401-CF9
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

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. KPNA1, also known as importin alpha 5, is the alpha subunit of karyopherin, which forms a complex with importin subunit beta-1 and functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. It is ubiquitously expressed and polyubiquitinated in the presence of RAG1. KPNA1 interacts with various virus nucleoproteins, including those of Ebola and influenza.
Synonyms:	KPNA1 Antibody, RCH2, SRP1, IPOA5, NPI-1, RCH2, Importin subunit alpha-5, Karyopherin subunit alpha-1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	KPNA1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-KPNA1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the N-terminus of human KPNA1.
Purity/Specificity:	Anti-KPNA1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with KPNA1 from other sources has not been determined.
Relevant Links:	• UniProtKB - P52294 • GeneID - 3836 • NCBI - NP_002255

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-KPNA1 Antibody has been tested for use in ELISA, Western Blotting, Immunocytochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 60 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
IF:	20 µg/mL
WB:	1 µg/mL

Formulation

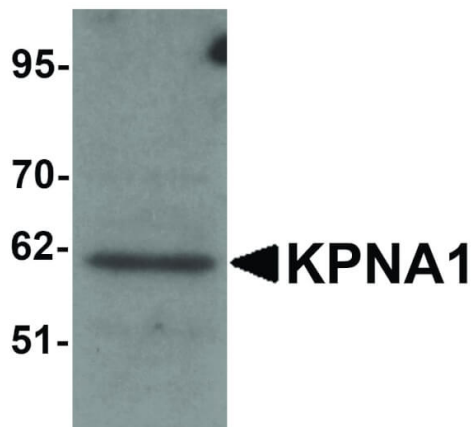
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

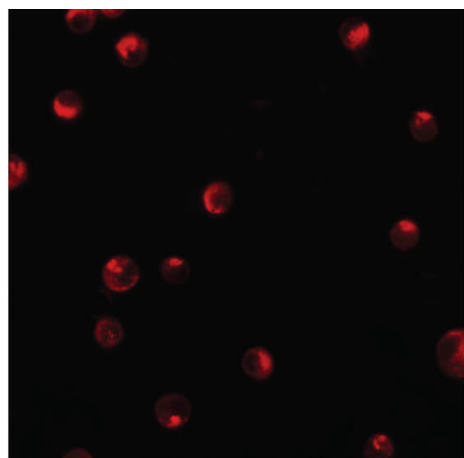
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several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

Expiration:

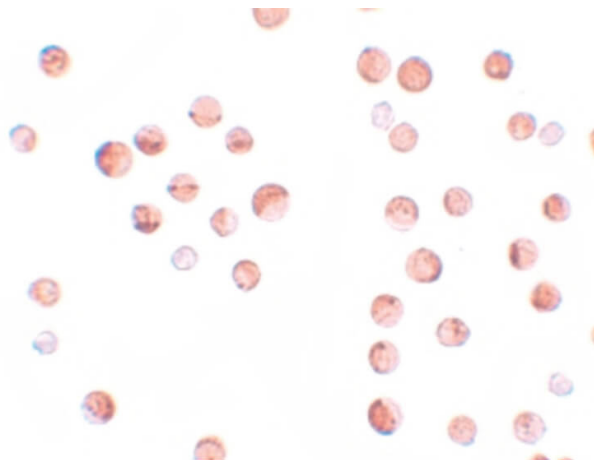
Expiration date is one (1) year from date of receipt.

Images**Western Blot**

Western Blot of KPNA1 antibody. Lane 1: HeLa cell lysate with KPNA1 antibody at 1 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: 60 kDa, 60 kDa for KPNA1. Other band(s): KPNA1 splice variants and isoforms.

**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of KPNA1 antibody. Tissue: K562 cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: KPNA1 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: KPNA1 is nuclear and cytoplasmic. Staining: KPNA1 as red fluorescent signal.

**Immunohistochemistry**

Immunocytochemistry of KPNA1 antibody. Tissue: HeLa cells. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: KPNA1 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: KPNA1 is nuclear and cytoplasmic. Staining: KPNA1 as precipitated blue signal with brown nuclear 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.