

ARG55333 anti-KPNA1 / Importin alpha 5 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes KPNA1 / Importin alpha 5
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	KPNA1 / Importin alpha 5
Species	Human
Immunogen	Recombinant protein of Human KPNA1 (NP_002255.3)
Conjugation	Un-conjugated
Alternate Names	Importin subunit alpha-5; SRP1; Nucleoprotein interactor 1; IPOA5; RCH2; RAG cohort protein 2; SRP1-beta; NPI-1; Karyopherin subunit alpha-1

Application Instructions

Application table	Application	Dilution
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	A549	
Observed Size	~ 60 kDa	

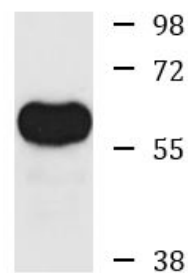
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 16646 Mouse GeneID: 3836 Human Swiss-port # P52294 Human Swiss-port # Q60960 Mouse
Gene Symbol	KPNA1
Gene Full Name	karyopherin alpha 1 (importin alpha 5)
Background	The transport of molecules between the nucleus and the cytoplasm in eukaryotic cells is mediated by the nuclear pore complex (NPC), which consists of 60-100 proteins. Small molecules (up to 70 kD) can pass through the nuclear pore by nonselective diffusion while larger molecules are transported by an active process. The protein encoded by this gene belongs to the importin alpha family, and is involved in nuclear protein import. This protein interacts with the recombination activating gene 1 (RAG1) protein and is a putative substrate of the RAG1 ubiquitin ligase. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2012]
Function	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. 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. 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. In vitro, mediates the nuclear import of human cytomegalovirus UL84 by recognizing a non-classical NLS. [UniProt]
Research Area	Immune System antibody; Signaling Transduction antibody
Calculated Mw	60 kDa
PTM	Polyubiquitinated in the presence of RAG1 (in vitro).

Images



A549

ARG55333 anti-KPNA1 / Importin alpha 5 antibody WB image

Western blot: A549 cell lysate stained with ARG55333 anti-KPNA1 / Importin alpha 5 antibody.