

Goat Anti-KPNA3 / IPOA4 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1603a**Specification**

Goat Anti-KPNA3 / IPOA4 Antibody - Product Information

Application	WB, IHC, Pep-ELISA
Primary Accession	O00505
Other Accession	NP_002258 , 3839 , 16648 (mouse)
Reactivity	Human, Mouse, Rat
Predicted	Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	57811

Goat Anti-KPNA3 / IPOA4 Antibody - Additional Information**Gene ID** 3839**Other Names**

Importin subunit alpha-4, Importin alpha Q2, Qip2, Karyopherin subunit alpha-3, SRP1-gamma, KPNA3, QIP2

DilutionWB~~1:1000
IHC~~1:100~500
Pep-ELISA~~N/A**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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-KPNA3 / IPOA4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-KPNA3 / IPOA4 Antibody - Protein Information**Name** KPNA3**Synonyms** QIP2

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. Recognizes NLSs of influenza A virus nucleoprotein probably through ARM repeats 7-9.

Cellular Location

Cytoplasm. Nucleus

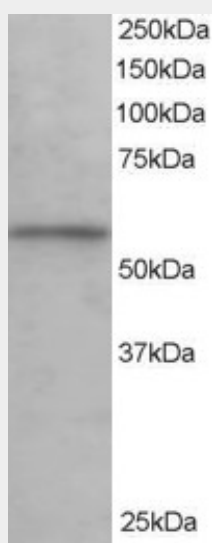
Tissue Location

Ubiquitous. Highest levels in heart and skeletal muscle

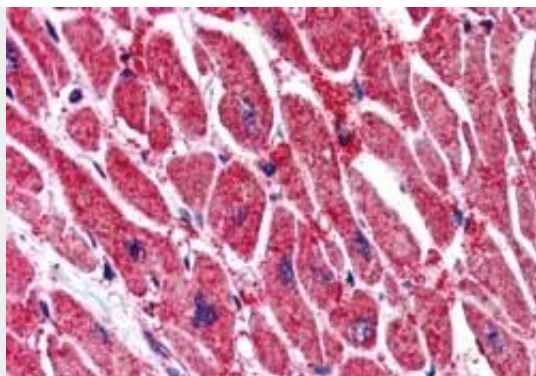
Goat Anti-KPNA3 / IPOA4 Antibody - Protocols

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](#)

Goat Anti-KPNA3 / IPOA4 Antibody - Images

AF1603a staining (0.1 µg/ml) of Human Testis lysate (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



AF1603a (5 µg/ml) staining of paraffin embedded Human Heart. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-KPNA3 / IPOA4 Antibody - 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.

Goat Anti-KPNA3 / IPOA4 Antibody - References

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.
Plasmodium circumsporozoite protein promotes the development of the liver stages of the parasite. Singh AP, et al. Cell, 2007 Nov 2. PMID 17981117.
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Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.
Global, in vivo, and site-specific phosphorylation dynamics in signaling networks. Olsen JV, et al. Cell, 2006 Nov 3. PMID 17081983.