10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KPNA3 / Importin Alpha 4 Antibody (C-Terminus)

Goat Polyclonal Antibody
Catalog # ALS12202

Specification

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Product Information

Application	**IHC**
Primary Accession	O00505
Reactivity	**Human, Mouse, Rat, Rabbit, Hamster, Monkey, Pig, Chicken, Horse, Bovine, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**58kDa KDa**

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Additional Information

Gene ID 3839

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

Target/Specificity
Human KPNA3.

Reconstitution & Storage
Store at -20°C. Minimize freezing and thawing.

Precautions
KPNA3 / Importin Alpha 4 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - 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

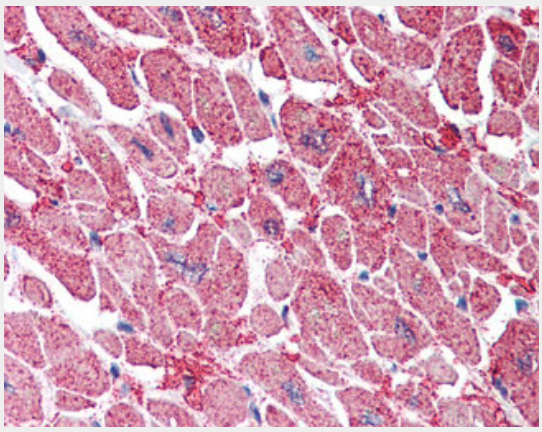
Tissue Location
Ubiquitous. Highest levels in heart and skeletal muscle

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Images



Anti-KPNA3 antibody IHC of human heart.

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - Background

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.

KPNA3 / Importin Alpha 4 Antibody (C-Terminus) - References

Takeda S.,et al.Cytogenet. Cell Genet. 76:87-93(1997).
Koehler M.,et al.FEBS Lett. 417:104-108(1997).
Nachury M.V.,et al.Proc. Natl. Acad. Sci. U.S.A. 95:582-587(1998).
Fischer R.,et al.Submitted (MAY-1997) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).