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KPNA3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6767b

Specification

KPNA3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession O00505

KPNA3 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP6767b was selected from the C-term region of human KPNA3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KPNA3 Antibody (C-term) Blocking Peptide - 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 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

KPNA3 Antibody (C-term) Blocking Peptide - Images

KPNA3 Antibody (C-term) Blocking Peptide - Background

KPNA3 belongs to the importin alpha family, and is involved in nuclear protein import.

KPNA3 Antibody (C-term) Blocking Peptide - References

Singh,A.P., et.al., Cell 131 (3), 492-504 (2007)