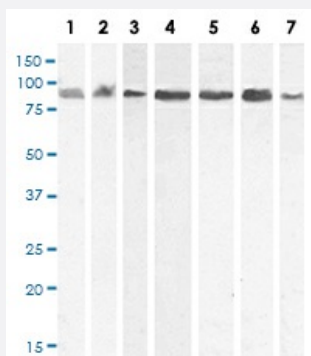


KPNB1 polyclonal antibody

Catalog # PAB6909

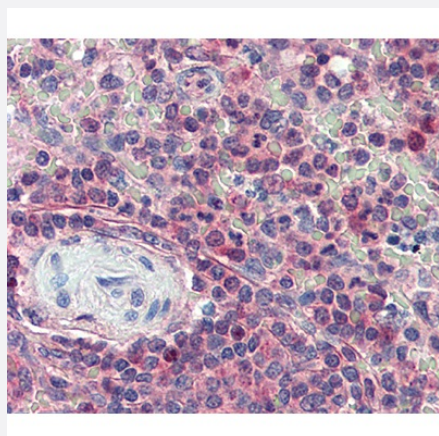
Size 100 ug

Applications



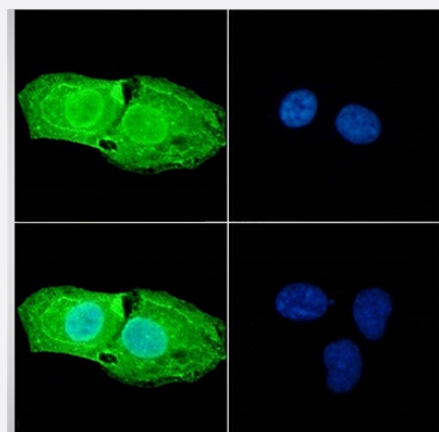
Western Blot (Cell lysate)

KPNB1 polyclonal antibody (Cat # PAB6909) (0.03 ug/mL) staining of A431 (1), HEK293 (2), Jurkat (3), (0.01 ug/mL) Daudi (4), HeLa (5) and (0.1 ug/mL) Kelly (6) and KNRK (7) cell lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



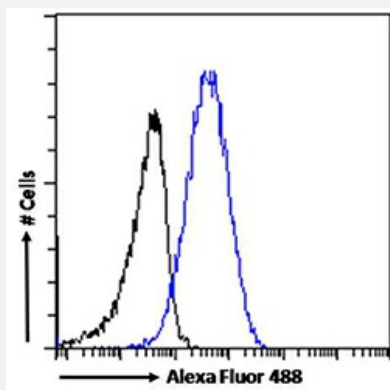
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of human spleen with KPNB1 polyclonal antibody (Cat # PAB6909)



Immunofluorescence

Immunofluorescent staining of U-2 OS cell line with KPNB1 polyclonal antibody (Cat # PAB6909). Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL), showing nuclear membrane, nuclear and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL).



Flow Cytometry

Flow cytometric analysis of A431 cells (blue line) with KPNB1 polyclonal antibody (Cat # PAB6909). Permeabilized with 0.5% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (1 ug/mL). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.

Specification

Product Description Goat polyclonal antibody raised against synthetic peptide of KPNB1.

Immunogen A synthetic peptide corresponding to human KPNB1.

Sequence C-RRSKTNKAKTLAT

Host Goat

Theoretical MW (kDa) 97.2

Reactivity Human

Form Liquid

Purification Antigen affinity purification

Concentration 0.5 mg/mL

Quality Control Testing Antibody Reactive Against Synthetic Peptide.

Recommend Usage
 ELISA (1:32000)
 Flow Cytometry (10 ug/mL)
 Immunohistochemistry (5 ug/mL)
 Immunofluorescence (10 ug/mL)
 Western Blot (0.03-0.1 ug/mL)
 The optimal working dilution should be determined by the end user.

Storage Buffer In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)

Storage Instruction
 Store at -20°C.
 Aliquot to avoid repeated freezing and thawing.

Note This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

KPNB1 polyclonal antibody (Cat # PAB6909) (0.03 ug/mL) staining of A431 (1), HEK293 (2), Jurkat (3), (0.01 ug/mL) Daudi (4), HeLa (5) and (0.1 ug/mL) Kelly (6) and KNRK (7) cell lysate (35 ug protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of human spleen with KPNB1 polyclonal antibody (Cat # PAB6909)

- Immunofluorescence

Immunofluorescent staining of U-2 OS cell line with KPNB1 polyclonal antibody (Cat # PAB6909). Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL), showing nuclear membrane, nuclear and cytoplasmic staining. The nuclear stain is DAPI (blue). Negative control: Unimmunized goat IgG (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (2 ug/mL).

- Enzyme-linked Immunoabsorbent Assay

- Flow Cytometry

Flow cytometric analysis of A431 cells (blue line) with KPNB1 polyclonal antibody (Cat # PAB6909). Permeabilized with 0.5% Triton. Primary incubation 1hr (10 ug/mL) followed by Alexa Fluor 488 secondary antibody (1 ug/mL). IgG control: Unimmunized goat IgG (black line) followed by Alexa Fluor 488 secondary antibody.

Gene Info — KPNB1

Entrez GeneID [3837](#)

Protein Accession# [NP_002256.2](#)

Gene Name KPNB1

Gene Alias IMB1, IPO1, IPOB, Impnb, MGC2155, MGC2156, MGC2157, NTF97

Gene Description karyopherin (importin) beta 1

Omim ID [602738](#)

Gene Ontology [Hyperlink](#)

Gene Summary

Nucleocytoplasmic transport, a signal- and energy-dependent process, takes place through nuclear pore complexes embedded in the nuclear envelope. The import of proteins containing a nuclear localization signal (NLS) requires the NLS import receptor, a heterodimer of importin alpha and beta subunits also known as karyopherins. Importin alpha binds the NLS-containing cargo in the cytoplasm and importin beta docks the complex at the cytoplasmic side of the nuclear pore complex. In the presence of nucleoside triphosphates and the small GTP binding protein Ran, the complex moves into the nuclear pore complex and the importin subunits dissociate. Importin alpha enters the nucleoplasm with its passenger protein and importin beta remains at the pore. Interactions between importin beta and the FG repeats of nucleoporins are essential in translocation through the pore complex. The protein encoded by this gene is a member of the importin beta family. [provided by RefSeq]

Other Designations

importin 1|importin 90|importin beta-1 subunit|karyopherin beta 1|nuclear factor p97

Publication Reference

- [Osteoblast regulation via ligand-activated nuclear trafficking of the oxytocin receptor.](#)

Di Benedetto A, Sun L, Zamboni CG, Tamma R, Nico B, Calvano CD, Colaianni G, Ji Y, Mori G, Grano M, Lu P, Colucci S, Yuen T, New MI, Zallone A, Zaidi M.

PNAS 2014 Nov; 111(46):16502.

Application: IF, Mouse, Osteoblasts

- [Spatial coordination of spindle assembly by chromosome-mediated signaling gradients.](#)

Caudron M, Bunt G, Bastiaens P, Karsenti E.

Science 2005 Aug; 309(5739):1373.

Disease

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Chromosome Deletion](#)