



Anti-KPNB1 (aa 851-863) polyclonal antibody (DPABH-05668)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	Functions in nuclear protein import, either in association with an adapter protein, like an importin-alpha subunit, which binds to nuclear localization signals (NLS) in cargo substrates, or by acting as autonomous nuclear transport receptor. Acting autonomously, serves itself as NLS receptor. 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. Mediates autonomously the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5. Binds to a beta-like import receptor binding (BIB) domain of RPL23A. In association with IPO7 mediates the nuclear import of H1 histone. In vitro, mediates nuclear import of H2A, H2B, H3 and H4 histones. In case of HIV-1 infection, binds and mediates the nuclear import of HIV-1 Rev. Imports PRKCI into the nucleus.
Immunogen	Synthetic peptide (C-RRSKTNAKTLAT) corresponding to amino acids 851-863 from C terminus of human NTF97/Importin beta
Isotype	IgG
Source/Host	Goat
Species Reactivity	Human
Purification	Immunogen affinity purified
Conjugate	Unconjugated
Applications	WB, IHC-P

Format	Liquid
Size	50 µg
Buffer	pH: 7.30; Constituents: 99% Tris buffered saline, 0.5% BSA
Preservative	0.02% Sodium Azide
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

GENE INFORMATION

Gene Name	KPNB1 karyopherin (importin) beta 2 [Homo sapiens]
Official Symbol	KPNB1
Synonyms	KPNB1; karyopherin (importin) beta 1; IMB1; IPO1; IPOB; Impnb; NTF97; importin subunit beta-1; PTAC97; importin 1; importin 90; importin-90; nuclear factor p97; importin beta-1 subunit; karyopherin subunit beta-1; pore targeting complex 97 kDa subunit;
Entrez Gene ID	3837
Protein Refseq	NP_001263382.1
UniProt ID	B7Z752
Pathway	Activation of DNA fragmentation factor; Apoptosis; Apoptotic execution phase; Disease
Function	Ran GTPase binding; enzyme binding; nuclear localization sequence binding; poly(A) RNA binding