

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Importin β /KPNB1 in ELISA and Western Blot. It detects mouse and rat Importin β /KPNB1 in Western Blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 845208
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Importin β /KPNB1 Met1-Gly155 Accession # Q14974
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

KPNB1 (Karyopherin subunit beta 1), also called Importin β 1, NTF97 (nuclear transport factor, 97 kDa) or PTAC97 (pore targeting complex, 97 kDa), is a member of the Importin β family of proteins. It is ubiquitously expressed and plays many roles in the nucleus. Primarily, KPNB1 transports various complexes from cytoplasm into nucleus, either alone or with a KPNA adaptor. The 876 amino acid (aa) human KPNB1 contains an N-terminal IBB/Importin β domain (aa 21-101), and eight HEAT (solenoid) domains (aa 124-726). A 731 aa splice variant begins with Met146, while an 845 aa variant shows a 2 aa substitution for aa 702-734. Binding sites for adaptors and for its regulator, Ran-GTP, overlap within the HEAT domains. Human KPNB1 aa 1-155 shares 99% and 97% aa sequence identity with mouse and rat KPNB1, respectively.

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