

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Importin α5/KPNA1 in Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Importin α5/KPNA1 Met1-Val132 Accession # P52294
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 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.

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

Importin subunit alpha-5 (KPNA1, Karyopherin subunit alpha 1; also SRP1β, NPI-1 and RAG2) is a 65 kDa member of the importin alpha family of proteins. It is ubiquitously expressed, and found in both nucleus and cytoplasm. KPNA1 functions as a cargo carrier that transports various complexes from cytoplasm into nucleus. Two scenarios are possible. First, NLS-containing cargo molecules bind to KPNA1, which then binds to importin β; alternatively, KPNA1 and importin β initially form a complex that primes KPNA1 for subsequent cargo binding. In either case, importin β binds to the nuclear pore, facilitating transport into the nucleus. Human KPNA1 is 538 amino acids (aa) in length. It contains an N-terminal IBB/importin β domain (aa 1-57), ten Armadillo repeats that bind "cargo" (aa 77-504) and two intervening NLS binding sites. Over aa 1-132, human KPNA1 shares 97% aa identity with mouse KPNA1.

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