

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Importin α 2/KPNA2 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human KPNA1, A3, A4, A5, or B1 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 682239
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Importin α 2/KPNA2 Ser2-Asp132 Accession # P52292
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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

Importin α 2, also known as KPNA2 (Karyopherin subunit alpha 2), SRP1a, or RAG1, is a 58-60 kDa member of the Importin alpha family of proteins. It is ubiquitously expressed, and found in both nucleus and cytoplasm. Importin α 2 functions as a cargo carrier that transports various complexes from cytoplasm into nucleus. For the MRN DNA repair complex, Importin α 2 first binds to NBS1, and then to Importin β 1, which mediates movement through the nuclear pore. Human Importin α 2 is 529 amino acids (aa) in length. It contains an N-terminal IBB/Importin β domain (aa 2-60), ten Armadillo repeats that bind "cargo" (aa 71-496) and two intervening NLS binding sites. There is one splice variant that shows a deletion of aa 72-310, coupled to an 11 aa substitution for aa 389-406. Over aa 1-132, human Importin α 2 shares 94% aa identity with mouse Importin α 2.

PRODUCT SPECIFIC NOTICES

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