

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Importin α 2/KPNA2 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) KPNA1, rhKPNA3, rhKPNA4, rhKPNA5, or rhKPNB1 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 682208
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Importin α 2/KPNA2 Ser2-Asn132 Accession # P52292
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 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.

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 subunit α 2, also known as KPNA2 (Karyopherin subunit alpha 2), SRP1a, and 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 b 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. The aminoacid region 1-132 of human Importin α 2 shares a 94% homology with mouse Importin α 2.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.