

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 rhKPNA1 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
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

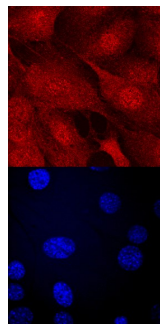
APPLICATIONS

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.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 μ g/mL	See Below

DATA

Immunocytochemistry



Importin α 2/KPNA2 in Ntera-2 Human Cell Line.
Importin α 2/KPNA2 was detected in immersion fixed Ntera-2 human testicular embryonic carcinoma cell line using Mouse Anti-Human Importin α 2/KPNA2 Monoclonal Antibody (Catalog # MAB62071) at 10 μ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

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 amino acid region 1-132 of human Importin α 2 shares a 94% homology with mouse Importin α 2.