Anti-KPNA2 Antibody [JM90-33]

ET1705-61

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, FC
Molecular Wt:	Predicted band size: 58 kDa
Clone number:	JM90-33

Description: Functions in nuclear protein import as an adapter protein for nuclear receptor KPNB1. Binds specifically and directly to substrates containing either a simple or bipartite NLS motif. Docking of the importin/substrate complex to the nuclear pore complex (NPC) is mediated by KPNB1 through binding to nucleoporin FxFG repeats and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to importin-beta and the three components separate and importin-alpha and -beta are re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran from importin. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus.

Immunogen: Synthetic peptide within Human KPNA2 aa 41-90 / 529.

Positive control: Hela cell lysate, 293T cell lysate, HepG2 cell lysate, NIH/3T3 cell lysate, PC-12 cell lysate, 293T.

Subcellular location: Cytoplasm, Endoplasmic reticulum, Golgi apparatus, Membrane, Nucleus.

Database links: SwissProt: P52292 Human | P52293 Mouse | Q6P6T9 Rat

Recommended Dilutions:

WB	1:500-1:2,000
FC	1:50-1:100

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

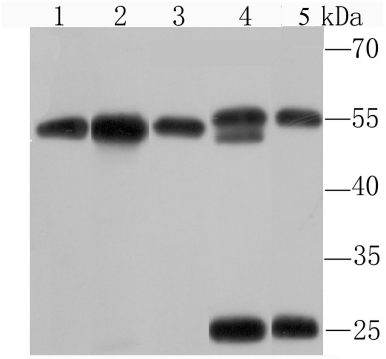

Fig1: Western blot analysis of KPNA2 on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1705-61, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.

Positive control:

Lane 1: Hela cell lysate
Lane 2: 293T cell lysate
Lane 3: HepG2 cell lysate
Lane 4: NIH/3T3 cell lysate
Lane 5: PC-12 cell lysate

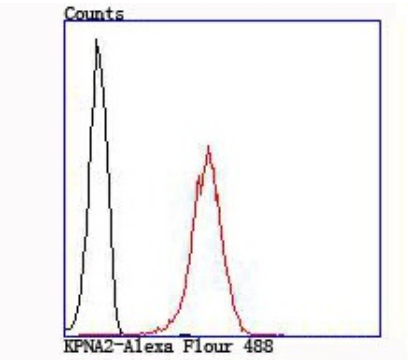

Fig2: Flow cytometric analysis of KPNA2 was done on 293T cells. The cells were fixed, permeabilized and stained with the primary antibody (ET1705-61, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG Secondary antibody at 1/1,000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

Background References

1. Yang CP et al. Identification and characterization of nuclear and nucleolar localization signals in 58-kDa microspherule protein (MSP58). J Biomed Sci 22:33 (2015).
2. Rachidi SM et al. Molecular profiling of multiple human cancers defines an inflammatory cancer-associated molecular pattern and uncovers KPNA2 as a uniform poor prognostic cancer marker. PLoS One 8:e57911 (2013).