

For Research Use Only

# KPNA3 Recombinant monoclonal antibody

Catalog Number: 86722-1-RR



## Basic Information

<b>Catalog Number:</b> 86722-1-RR	<b>GenBank Accession Number:</b> BC017355	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 3839	<b>CloneNo.:</b> 251681E1
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O00505	<b>Recommended Dilutions:</b> WB: 1:5000-1:50000
<b>Isotype:</b> IgG	<b>Full Name:</b> karyopherin alpha 3 (importin alpha 4)	
<b>Immunogen Catalog Number:</b> AG27755	<b>Calculated MW:</b> 58 kDa	
	<b>Observed MW:</b> 57-60 kDa	

## Applications

**Tested Applications:**  
WB, ELISA

**Species Specificity:**  
human, mouse, rat

### Positive Controls:

**WB :** HepG2 cells, LNCaP cells, HeLa cells, Caco-2 cells, NIH/3T3 cells, PC-12 cells, HSC-t6 cells

## Background Information

KPNA3, karyopherin subunit alpha 3, also known as SRP1 or IPOA4. It is expected to be located in cytoplasm and nucleus, the protein is ubiquitous and highly expressed in heart, skeletal muscle. The calculated molecular weight of KPNA3 is 57 kDa. 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.

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

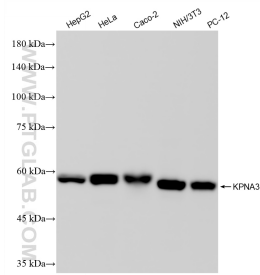
For technical support and original validation data for this product please contact:

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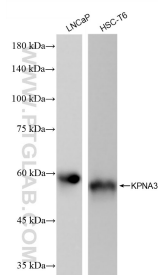
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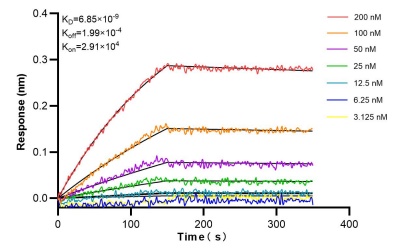
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 86722-1-RR (KPNA3 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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Bioluminescence resonance energy transfer (BRET) kinetic assays of 86722-1-RR against Human KPNA3 were performed. The affinity constant is 6.85 nM.