

# KPNA3 Polyclonal antibody

Catalog Number: 28050-1-AP

## Basic Information

<b>Catalog Number:</b> 28050-1-AP	<b>GenBank Accession Number:</b> BC017355	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 650 µg/ml	<b>GeneID (NCBI):</b> 3839	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:500 IF 1:200-1:800
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> O00505	
<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:**  
IF/ICC, IHC, WB, ELISA

**Species Specificity:**  
Human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB:** HepG2 cells,  
**IHC:** mouse brain tissue,  
**IF:** HepG2 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 KPNA1. 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 KPNA1 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 pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

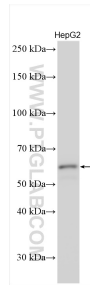
T: 4006900926

E: Proteintech-CN@ptglab.com

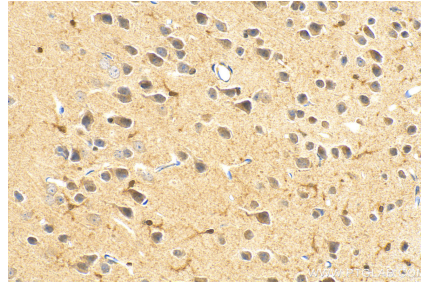
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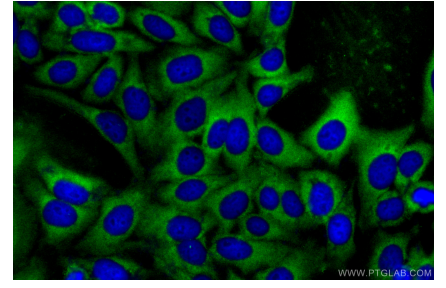
## Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 28050-1-AP (KPNA3 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 28050-1-AP (KPNA3 antibody) at dilution of 1:100 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using KPNA3 antibody (28050-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).