

KPNA3 Polyclonal antibody

Catalog Number: 28050-1-AP

Basic Information

Catalog Number:

28050-1-AP

Concentration:

650 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG27755

GenBank Accession Number:

BC017355

GeneID (NCBI):

3839

UNIPROT ID:

O00505

Full Name:

karyopherin alpha 3 (importin alpha 4)

Calculated MW:

58 kDa

Observed MW:

57-60 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IHC 1:50-1:500

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, 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, human brown disease

IF/ICC : 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 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:

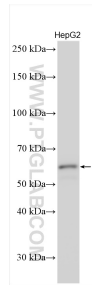
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

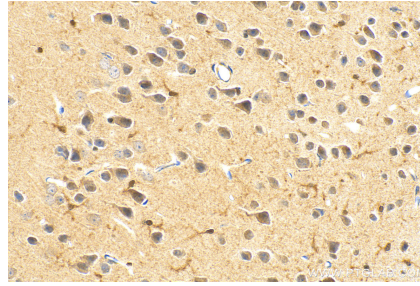
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

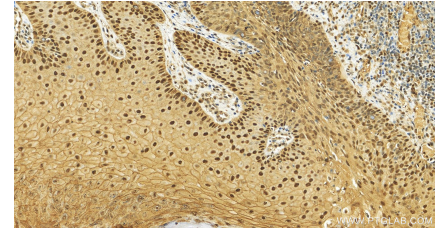
Selected Validation Data



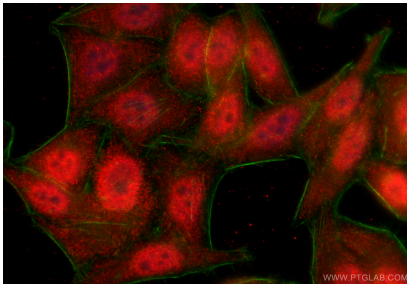
Various lysates were subjected to SDS PAGE followed by western blot with 28050-1-AP (KPNA3 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



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).



Immunohistochemical analysis of paraffin-embedded human brain tissue slide using 28050-1-AP (KPNA3 antibody) at dilution of 1:100 (under 20x 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®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4), CL488-Phalloidin (green).