

For Research Use Only

# KPNA4 Polyclonal antibody

Catalog Number: 12463-1-AP

Featured Product

7 Publications



## Basic Information

Catalog Number:

12463-1-AP

Concentration:

450 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3133

GenBank Accession Number:

BC034493

GeneID (NCBI):

3840

UNIPROT ID:

O00629

Full Name:

karyopherin alpha 4 (importin alpha 3)

Calculated MW:

521 aa, 58 kDa

Observed MW:

58 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:8000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:200-1:1000

IF/ICC 1:200-1:800

## Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, ColP

Species Specificity:

human, mouse, rat

Cited Species:

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 : A549 cells, NIH/3T3 cells, HeLa cells, Jurkat cells, mouse testis tissue, rat testis tissue

IP : A549 cells,

IHC : human colon cancer tissue,

IF/ICC : A549 cells,

## Background Information

KPNA4, also named importin subunit alpha-3, karyopherin-alpha4, is a cytoplasmic protein that recognizes nuclear localization signals (NLSs) and dock NLS-containing proteins to the nuclear pore complex. Nuclear import, mediated in part by karyopherin- $\alpha$  (KPNA)/importin- $\alpha$  subtypes, regulates transcription factor access to the genome and determines cell fate. KPNA4-mediated nuclear transport of Ras-responsive element-binding protein (RREB1), which sustains Ras/ERK pathway signaling through repressing miR-143/145 expression (PMID: 31822798). KPNA4 is one of the main isoforms that is activated in many human cancers. KPNA4 expression was elevated in head and neck of squamous cell carcinoma (PMID: 33188837).

## Notable Publications

Author	Pubmed ID	Journal	Application
Zhengqiang Wang	27633066	Tumour Biol	WB
Anna Nakanishi	36366568	Viruses	WB
Yisha Zhuo	33141406	Virol Sin	WB, ColP

## 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:

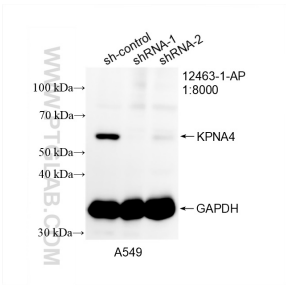
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

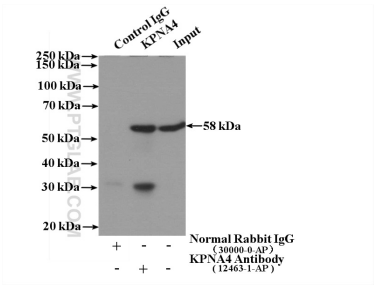
W: [ptgcn.com](http://ptgcn.com)

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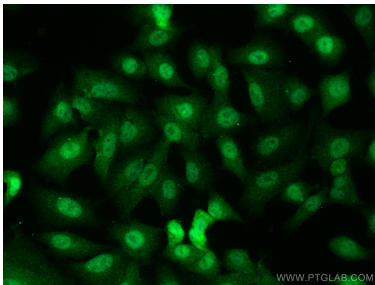
Selected Validation Data



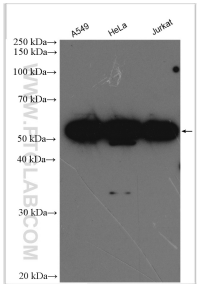
WB result of KPNA4 antibody (12463-1-AP; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-KPNA4 transfected A549 cells.



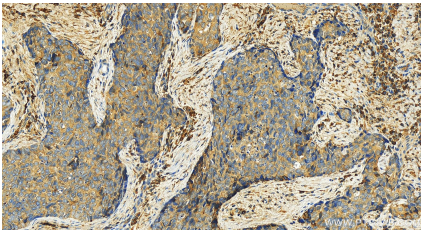
IP result of anti-KPNA4 (IP:12463-1-AP, 4ug; Detection:12463-1-AP 1:600) with A549 cells lysate 2000ug.



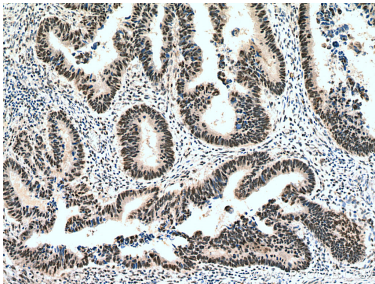
Immunofluorescent analysis of (4% PFA) fixed A549 cells using KPNA4 antibody (12463-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Various lysates were subjected to SDS PAGE followed by western blot with 12463-1-AP (KPNA4 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human bowen disease slide using 12463-1-AP (KPNA4 antibody) at dilution of 1:800 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 12463-1-AP (KPNA4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).