### For Research Use Only

# KPNA4 Polyclonal antibody

Catalog Number: 12463-1-AP

**Featured Product** 

6 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 12463-1-AP BC034493

3)

GeneID (NCBI): Size:

150ul, Concentration: 260 µg/ml by 3840

Nanodrop and 147 µg/ml by Bradford Full Name:

method using BSA as the standard;

Rabbit Calculated MW:

521 aa, 58 kDa Isotype: IgG Observed MW:

58 kDa Immunogen Catalog Number:

AG3133

**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 1:50-1:500 IF 1:20-1:200

**Applications** 

**Tested Applications:** 

IF, IHC, IP, WB, ELISA

**Cited Applications:** 

CoIP, WB

Species Specificity: human, mouse, rat

**Cited Species:** 

human, mouse

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: A549 cells.

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

buffer pH 6.0

## **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-a (KPNA)/importin-a 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).

karyopherin alpha 4 (importin alpha

#### **Notable Publications**

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

Storage

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

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

Aliquoting is unnecessary for -20°C storage

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

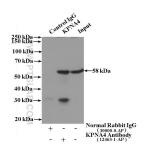
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

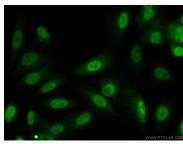
E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

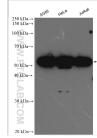
## **Selected Validation Data**



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



Immunofluorescent analysis of (10% Formaldehyde) fixed A549 cells using 12463-1-AP (KPNA4 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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 paraffinembedded 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).