

For Research Use Only

# KPNA4 Recombinant antibody, PBS Only

Catalog Number: 82898-2-PBS

Featured Product



## Basic Information

|   |   |   |
|---|---|---|
| <b>Catalog Number:</b><br>82898-2-PBS                     | <b>GenBank Accession Number:</b><br>BC034493                | <b>Purification Method:</b><br>Protein A purification |
| <b>Size:</b><br>100ug, Concentration: 1mg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>3840                               | <b>CloneNo.:</b><br>230098H1                          |
| <b>Source:</b><br>Rabbit                                  | <b>UNIPROT ID:</b><br>O00629                                |   |
| <b>Isotype:</b><br>IgG                                    | <b>Full Name:</b><br>karyopherin alpha 4 (importin alpha 3) |   |
| <b>Immunogen Catalog Number:</b><br>AG3133                | <b>Calculated MW:</b><br>521 aa, 58 kDa                     |   |
|   | <b>Observed MW:</b><br>58 kDa                               |   |

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), Indirect ELISA

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

## 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).

## Storage

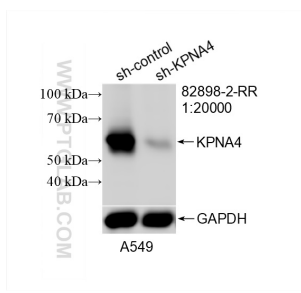
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

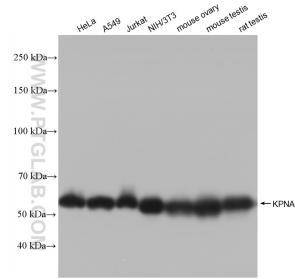
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)      E: proteintech@ptglab.com  
W: ptglab.com

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

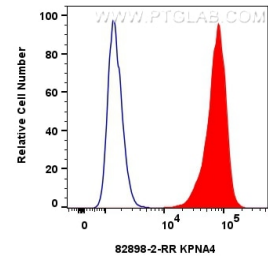
## Selected Validation Data



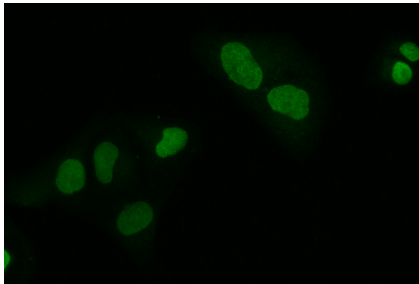
WB result of KPNA4 antibody (82898-2-RR; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-KPNA4 transfected A549 cells. This data was developed using the same antibody clone with 82898-2-PBS in a different storage buffer formulation.



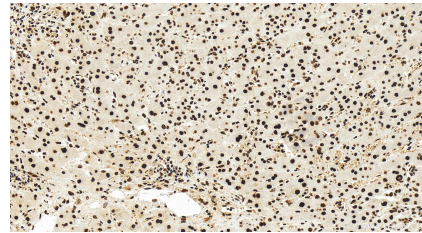
Various lysates were subjected to SDS PAGE followed by western blot with 82898-2-RR (KPNA4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82898-2-PBS in a different storage buffer formulation.



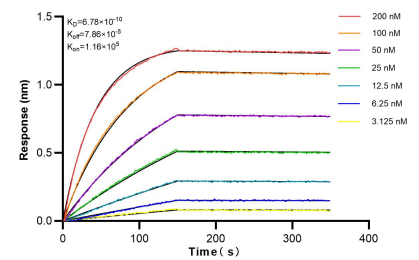
$1 \times 10^6$  A549 cells were intracellularly stained with 0.25 ug KPNA4 Recombinant antibody (82898-2-RR, Clone:230098H1) and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 82898-2-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using KPNA4 antibody (82898-2-RR, Clone: 230098H1) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 82898-2-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human intrahepatic cholangiocarcinoma tissue slide using 82898-2-RR (KPNA4 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82898-2-PBS in a different storage buffer formulation.



Bi-layer interferometry (BLI) kinetic assays of 82898-2-RR against Human KPNA4 were performed. The affinity constant is 0.678 nM.