## For Research Use Only

## KPNA4 Recombinant antibody

Catalog Number:82898-2-RR **Featured Product** 



**Basic Information** 

Catalog Number: GenBank Accession Number:

82898-2-RR BC034493 Protein A purification

GeneID (NCBI): CloneNo.: 100ul, Concentration: 1000 ug/ml by 3840 230098H1

Nanodrop: **UNIPROT ID:** Recommended Dilutions: 000629 WB 1:5000-1:50000 Rabbit IHC 1:50-1:500 Full Name: IF/ICC 1:50-1:500

Isotype: karyopherin alpha 4 (importin alpha IgG

Immunogen Catalog Number: Calculated MW:

521 aa, 58 kDa AG3133

58 kDa

Observed MW:

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity: human, mouse, rat

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

**Purification Method:** 

IHC: human intrahepatic cholangiocarcinoma tissue,

IF/ICC: U2OS 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-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).

Storage

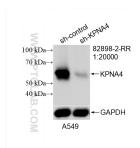
Store at -20°C. Stable for one year after shipment.

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

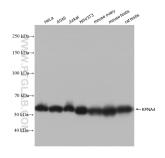
Aliquoting is unnecessary for -20°C storage

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

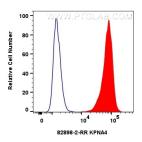
## **Selected Validation Data**



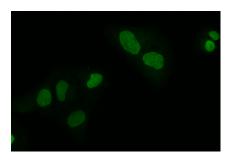
WB result of KPNA4 antibody (82898-2-RR; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-KPNA4 transfected A549 cells.



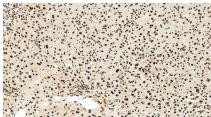
Various lysates were subjected to SDS PAGE followed by western blot with 82898-2-RR (KPNA4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 bours



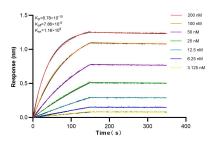
1x10^6 A549 cells were intracellularly stained with 0.25 ug (PNA4 Recombinant antibody (82898-2-RR, Clone:230098H1) and Coralite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



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 Affini Pure Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffinembedded 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).



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