

For Research Use Only

# CSNK2A1 Polyclonal antibody

Catalog Number:10992-1-AP

Featured Product

29 Publications



## Basic Information

### Catalog Number:

10992-1-AP

### Size:

150ul , Concentration: 700 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG1452

### GenBank Accession Number:

BC011668

### GeneID (NCBI):

1457

### UNIPROT ID:

P68400

### Full Name:

casein kinase 2, alpha 1 polypeptide

### Calculated MW:

45 kDa

### Observed MW:

40-45 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:5000-1:50000

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

IHC 1:200-1:2000

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse

### Positive Controls:

WB : A431 cells, PC-3 cells, K-562 cells, NIH/3T3 cells, Raji cells

IP : HeLa cells,

IHC : human breast cancer tissue, human colon cancer tissue

IF/ICC : HeLa 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

CSNK2A1(Casein kinase II subunit alpha) is also named as CK2A1 and belongs to the CK2 subfamily. The CSNK2A1 gene contains 8 exons whose sequences comprise bases 102 to 824 of the coding region of the human casein kinase II alpha subunit. Casein kinase II is a ubiquitous protein-serine/threonine kinase in eukaryotic cells that catalyzes the phosphorylation of many protein substrates and has been regarded as a second-messenger-independent protein kinase. This enzyme is composed of an  $\alpha$  subunit (37 to 44kDa) and a  $\beta$  subunit (24 to 28 kDa) and exists as an  $\alpha_2\beta_2$  tetramer (PMID:1448100). Casein kinase 2 has been found to be increased at protein level and up-regulated at the level of enzyme activity in the majority of cancers. However, elevated levels of casein kinase 2 are present in certain normal organs such as brain and testes.

## Notable Publications

Author	Pubmed ID	Journal	Application
C Shu	36306106	J Endocrinol Invest	WB,IP
Xuehui Li	34756889	J Biol Chem	IP
Xingtang Niu	32433772	J Burn Care Res	WB

## 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

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

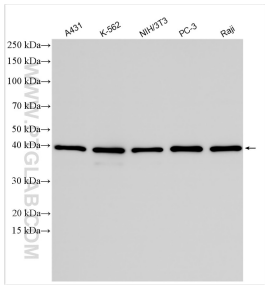
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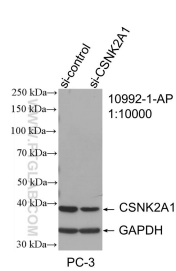
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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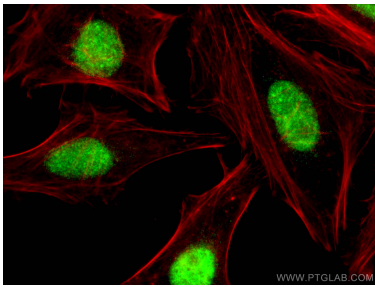
Selected Validation Data



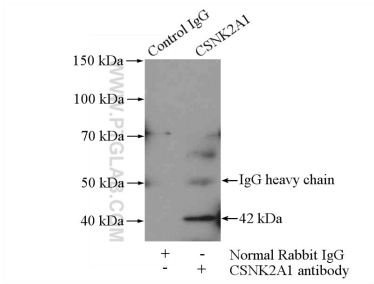
Various lysates were subjected to SDS PAGE followed by western blot with 10992-1-AP (CSNK2A1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



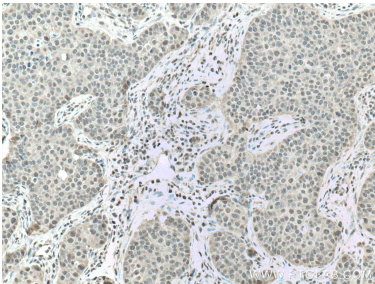
WB result of CSNK2A1 antibody (10992-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-CSNK2A1 transfected PC-3 cells.



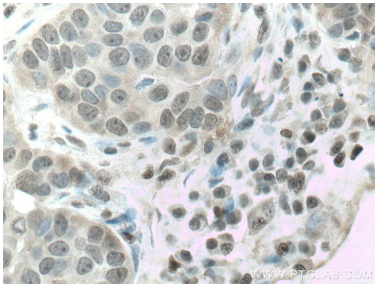
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using 10992-1-AP (CSNK2A1 antibody), at dilution of 1:100 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). Phalloidine stains the F-actin.



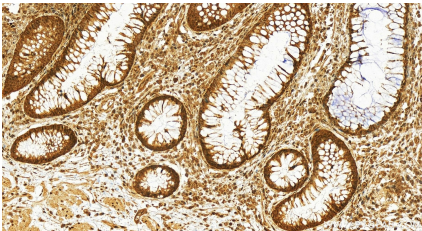
IP result of anti-CSNK2A1 (IP:10992-1-AP, 4ug; Detection:10992-1-AP 1:1000) with HeLa cells lysate 2800ug.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10992-1-AP (CSNK2A1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 10992-1-AP (CSNK2A1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 10992-1-AP (CSNK2A1 antibody) at dilution of 1:1600 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).