

For Research Use Only

# p70(S6K) Polyclonal antibody

Catalog Number: 14485-1-AP

Featured Product

190 Publications



## Basic Information

### Catalog Number:

14485-1-AP

### Concentration:

500 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG5883

### GenBank Accession Number:

BC053365

### GeneID (NCBI):

6198

### UNIPROT ID:

P23443

### Full Name:

ribosomal protein S6 kinase, 70kDa, polypeptide 1

### Calculated MW:

59 kDa

### Observed MW:

65-75 kDa, 80-85 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:8000

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

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig, rabbit, megalobrama amblycephala

**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** : HEK-293 cells, IGF-1 treated MCF-7 cells, Jurkat cells, NIH/3T3 cells, HeLa cells, PC-12 cells, C6 cells, mouse brain tissue, rat brain tissue

**IP** : HeLa cells,

**IHC** : human liver cancer tissue,

**IF/ICC** : HepG2 cells,

## Background Information

RPS6KB1(Ribosomal protein S6 kinase beta-1) is also named as STK14A, p70 S6KA, and belongs to the S6 kinase subfamily. RPS6KB1 is a major substrate of mTOR and acts as a crucial effector of mTOR signaling pathway. It plays a key role in cell growth and proliferation by regulating INS sensitivity, metabolism, protein synthesis, and cell cycle. RPS6KB1 may play an important role in the progression of HCC and could serve as a potential molecular target for HCC therapy (PMID:22684641). The Rps6kb1 gene encodes the 70 kDa ribosomal protein S6 kinase (p70S6K). The PI3K/mTOR signalling pathway is one of the major mechanisms for controlling cell survival, proliferation, and metabolism and is the central regulator of translation of some components of the protein synthesis system. Due to alternative translation, two isoform S6K1 proteins are known to exist in mammalian cells: p85 S6K1 and p70 S6K1, which is identical to p85 S6K but lacks its first 23 amino acids. In addition, mammalian cells express a second S6K1 isoform spanning 316 amino acids (p31 S6K1).

## Notable Publications

Author	Pubmed ID	Journal	Application
Jing Chen	34650978	Front Cell Dev Biol	WB
Yancun Yin	30310320	Cancer Manag Res	WB
Genquan Yue	31702026	Mol Med Rep	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

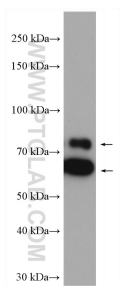
T: 4006900926

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

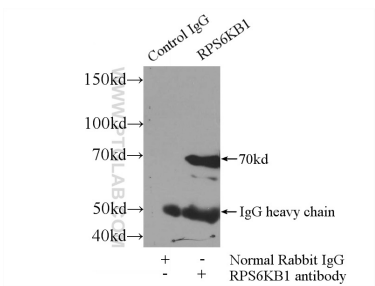
W: [ptgcn.com](http://ptgcn.com)

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

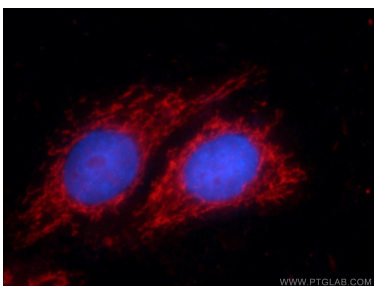
Selected Validation Data



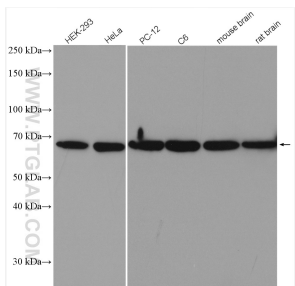
MCF-7 cells were subjected to SDS PAGE followed by western blot with 14485-1-AP (p70(S6K) antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



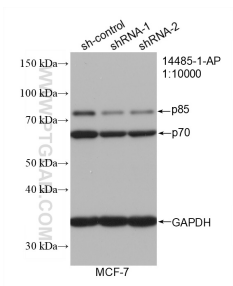
IP result of anti-p70(S6K) (IP:14485-1-AP, 3ug; Detection:14485-1-AP 1:1000) with HeLa cells lysate 3000ug.



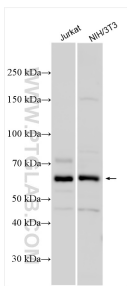
Immunofluorescent analysis of HepG2 cells using 14485-1-AP (p70S6K antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



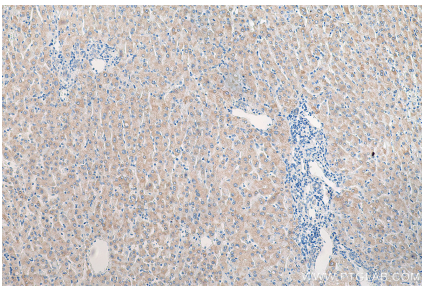
Various lysates were subjected to SDS PAGE followed by western blot with 14485-1-AP (p70(S6K) antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



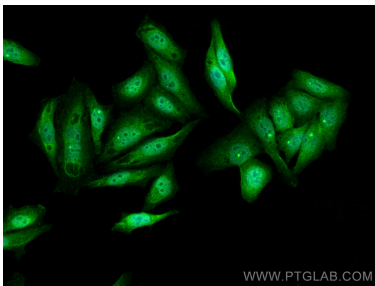
WB result of p70(S6K) antibody (14485-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-p70(S6K) transfected MCF-7 cells.



Various lysates were subjected to SDS PAGE followed by western blot with 14485-1-AP (p70(S6K) antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 14485-1-AP (p70(S6K) antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using p70(S6K) antibody (14485-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).