

## p70(S6K) Polyclonal antibody

Catalog Number: 14485-1-AP

Featured Product

145 Publications

## Basic Information

<b>Catalog Number:</b> 14485-1-AP	<b>GenBank Accession Number:</b> BC053365	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 500 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 6198	<b>Recommended Dilutions:</b> 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 1:10-1:100
<b>Source:</b> Rabbit	<b>Full Name:</b> ribosomal protein S6 kinase, 70kDa, polypeptide 1	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 59 kDa	
<b>Immunogen Catalog Number:</b> AG5883	<b>Observed MW:</b> 65-75 kDa, 80-85 kDa	

## Applications

<b>Tested Applications:</b> FC, IF, IHC, IP, WB, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> IF, IHC, WB	<b>WB :</b> 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
<b>Species Specificity:</b> human, mouse, rat	<b>IP :</b> HeLa cells,
<b>Cited Species:</b> human, rat, mouse, rabbit, pig, Megalobrama amblycephala	<b>IHC :</b> human liver cancer tissue,
	<b>IF :</b> HepG2 cells,
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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 pH 7.3.

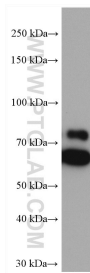
**Aliquoting is unnecessary for -20°C storage**

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

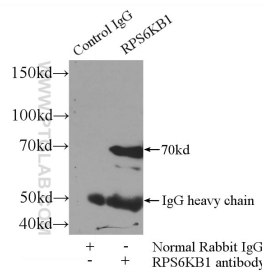
For technical support and original validation data for this product please contact:  
 T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
 E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
 W: [ptglab.com](http://ptglab.com)

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

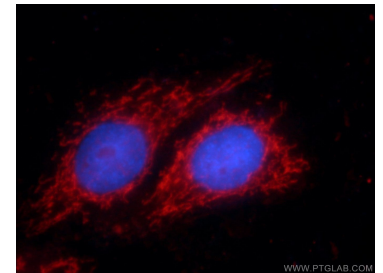
## Selected Validation Data



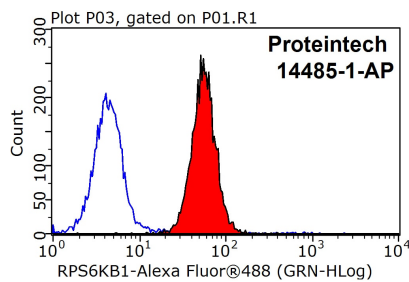
MCF-7 cells were subjected to SDS PAGE followed by western blot with 14485-1-AP (p70(S6K) antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



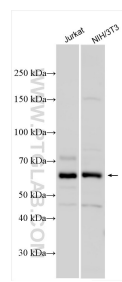
IP Result of anti-p70S6K (IP:14485-1-AP, 3ug; Detection:14485-1-AP 1:1000) with HeLa cells lysate 3000ug.



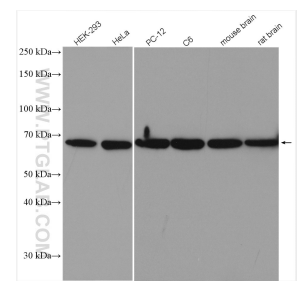
Immunofluorescent analysis of HepG2 cells using 14485-1-AP (p70S6K antibody) at dilution of 1:25 and Rhodamine-Goat anti-Rabbit IgG.



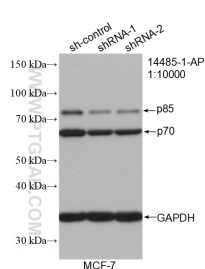
1X10<sup>6</sup> HepG2 cells were stained with 0.2ug p70S6K antibody (14485-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1500.



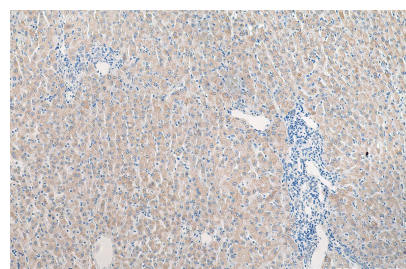
Various lysates were subjected to SDS PAGE followed by western blot with 14485-1-AP (p70(S6K) antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



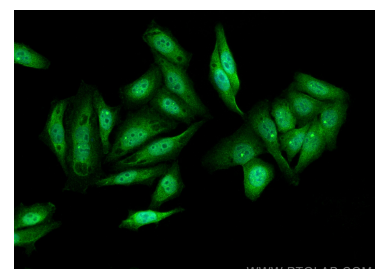
Various lysates were subjected to SDS PAGE followed by western blot with 14485-1-AP (p70(S6K) antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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.



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).