



# p70 S6 kinase $\alpha$ Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14888
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat;Pig
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	RPS6KB1
<b>Protein Name</b>	Ribosomal protein S6 kinase beta-1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human p70 S6 Kinase. AA range:337-386
<b>Specificity</b>	p70 S6 kinase $\alpha$ Polyclonal Antibody detects endogenous levels of p70 S6 kinase $\alpha$ protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	$\geq 90\%$
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	RPS6KB1; STK14A; Ribosomal protein S6 kinase beta-1; S6K-beta-1; S6K1; 70 kDa ribosomal protein S6 kinase 1; P70S6K1; p70-S6K 1; Ribosomal protein S6 kinase I; Serine/threonine-protein kinase 14A; p70 ribosomal S6 kinase alpha; p70 S6 kinase
<b>Observed Band</b>	60kD
<b>Cell Pathway</b>	Cell junction, synapse, synaptosome . Mitochondrion outer membrane. Mitochondrion. Colocalizes with URI1 at mitochondrion.; [Isoform Alpha I]: Nucleus. Cytoplasm.; [Isoform Alpha II]: Cytoplasm.
<b>Tissue Specificity</b>	Widely expressed.
<b>Function</b>	catalytic activity:ATP + a protein = ADP + a phosphoprotein.;enzyme regulation:Activation by serine/threonine phosphorylation and protein kinase C, inactivated by type 2A phosphatase.;function:Phosphorylates specifically ribosomal protein S6 in response to insulin or several classes of mitogens.;similarity:Belongs to the protein kinase superfamily.;similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily.;similarity:Contains 1 AGC-kinase C-terminal domain.;similarity:Contains 1 protein kinase domain.;subunit:Interacts with PPP1R9A/neurabin-1.;tissue specificity:Widely expressed.;



## Background

ribosomal protein S6 kinase B1(RPS6KB1) Homo sapiens This gene encodes a member of the ribosomal S6 kinase family of serine/threonine kinases. The encoded protein responds to mTOR (mammalian target of rapamycin) signaling to promote protein synthesis, cell growth, and cell proliferation. Activity of this gene has been associated with human cancer. Alternatively spliced transcript variants have been observed. The use of alternative translation start sites results in isoforms with longer or shorter N-termini which may differ in their subcellular localizations. There are two pseudogenes for this gene on chromosome 17. [provided by RefSeq, Jan 2013],

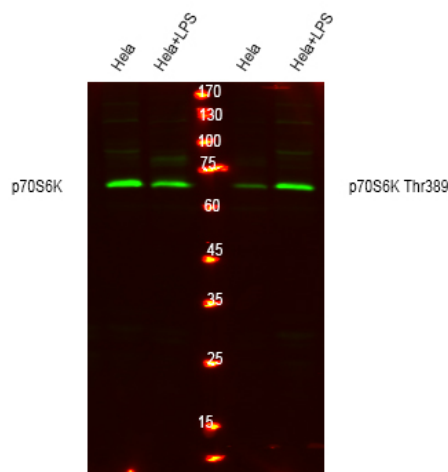
## matters needing attention

Avoid repeated freezing and thawing!

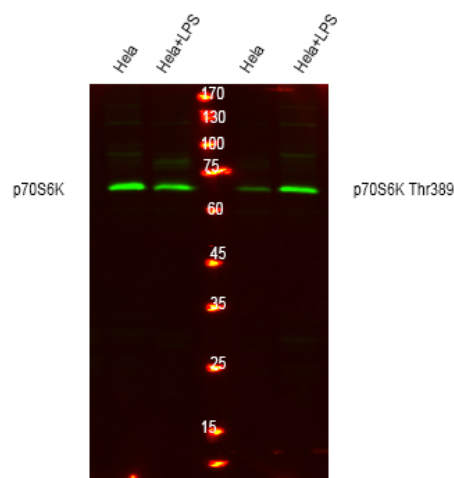
## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

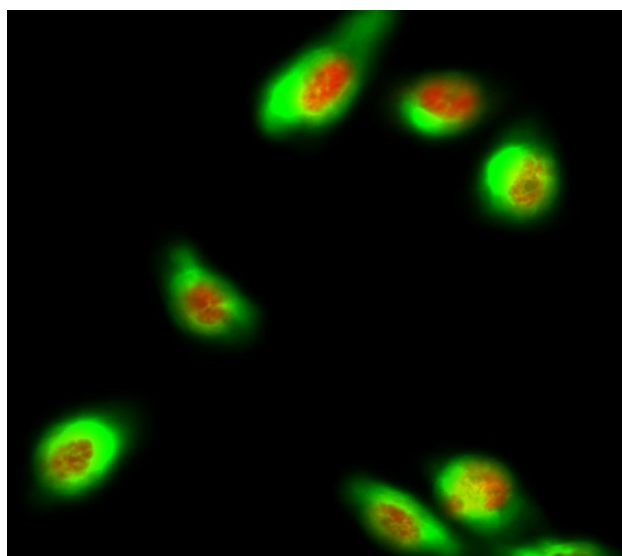
## Products Images



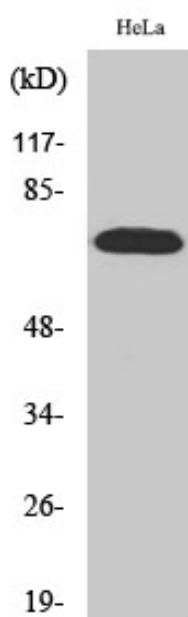
Western blot analysis of lysates from HeLa cells, treated with LPS 100ng/ml 30', using total P70 S6 Kinase Antibody(catalog: YT3555) and P70 S6 Kinase (phospho T389) antibody(catalog: YP1427). (Green) primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920) was diluted at 1:10000, 37° 1 hour.



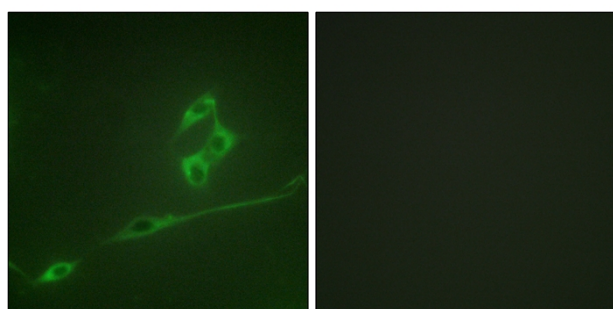
Ge, Cheng, et al. "Atheroprotective Pulsatile Flow Induces Ubiquitin-Proteasome-Mediated Degradation of Programmed Cell Death 4 in Endothelial Cells." PloS one 9.3 (2014): e91564.



Immunofluorescence analysis of HeLa cell. 1, p70 S6 kinase  $\alpha$  Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). CK7 Monoclonal Antibody (12D7) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



Western Blot analysis of various cells using p70 S6 kinase  $\alpha$  Polyclonal Antibody



Immunofluorescence analysis of NIH/3T3 cells, using p70 S6 Kinase Antibody. The picture on the right is blocked with the synthesized peptide.