



# p70 S6 kinase $\alpha$ (phospho Ser418) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-14513
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	RPS6KB1 STK14A P70S6K
<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 around the phosphorylation site of Ser418. AA range:384-433
<b>Specificity</b>	Phospho-p70 S6 kinase $\alpha$ (S418) Polyclonal Antibody detects endogenous levels of p70 S6 kinase $\alpha$ protein only when phosphorylated at S418.
<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 kinas
<b>Observed Band</b>	60kD
<b>Cell Pathway</b>	Cell junction, synapse, synaptosome . Mitochondrion outer membrane. Mitochondrion. Colocalizes with UR11 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],

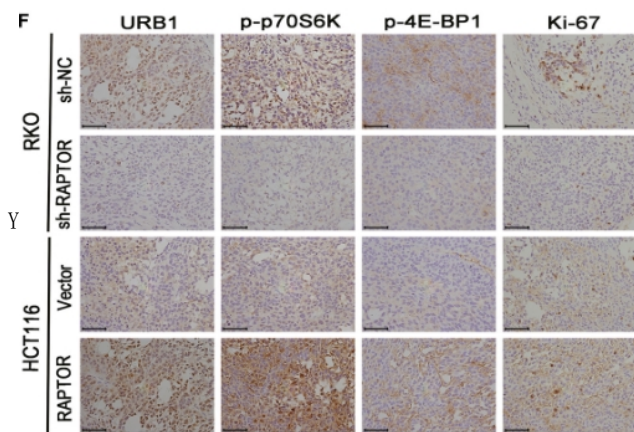
### matters needing attention

Avoid repeated freezing and thawing!

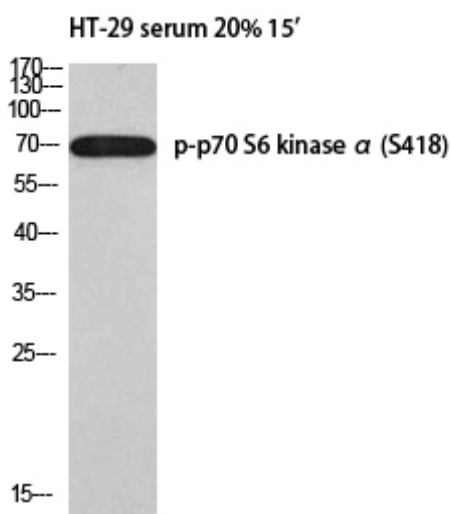
### Usage suggestions

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

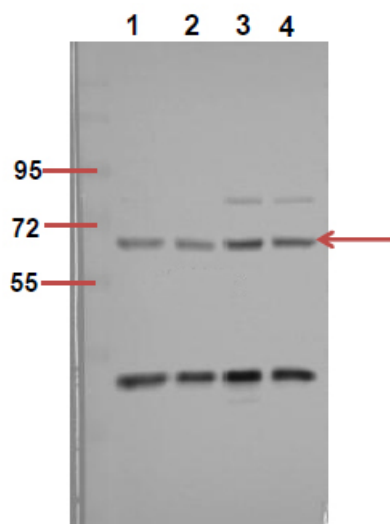
## Products Images



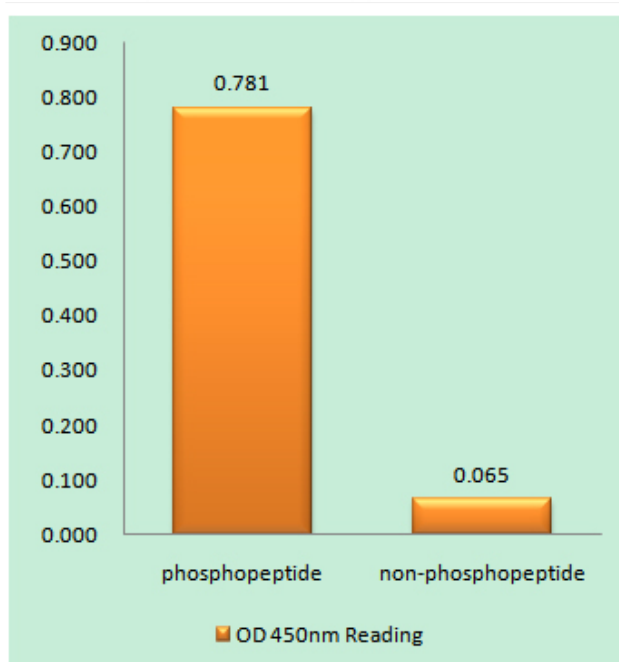
Wang, Tao, et al. "RAPTOR promotes colorectal cancer proliferation by inducing mTORC1 and upregulating ribosome assembly factor URB1." *Cancer medicine* 9.4 (2020): 1529-1543.



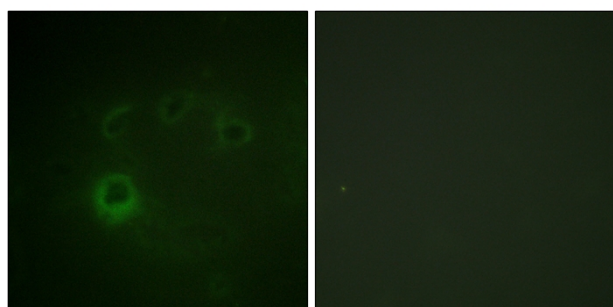
Western blot analysis of HT-29 serum 20% 15' using p-p70 S6 kinase  $\alpha$  (S418) antibody. Antibody was diluted at 1:1000



The picture was kindly provided by our customer, antibody was diluted at 1:500



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using p70 S6 Kinase (Phospho-Ser418) Antibody



Immunofluorescence analysis of COS7 cells, using p70 S6 Kinase (Phospho-Ser418) Antibody. The picture on the right is blocked with the phospho peptide.