

**p70 S6 kinase  $\alpha$  (phospho Thr412) Polyclonal Antibody**

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| <b>Catalog No :</b>          | YP0885   |
| <b>Reactivity :</b>          | Human;Mouse;Rat  |
| <b>Applications :</b>        | WB;IHC;IF;ELISA  |
| <b>Target :</b>              | p70 S6 kinase $\alpha$   |
| <b>Fields :</b>              | >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine resistance;>>ErbB signaling pathway;>>HIF-1 signaling pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>PI3K-Akt signaling pathway;>>AMPK signaling pathway;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>TGF-beta signaling pathway;>>Apelin signaling pathway;>>Fc gamma R-mediated phagocytosis;>>Thermogenesis;>>Insulin signaling pathway;>>Insulin resistance;>>Shigellosis;>>Human cytomegalovirus infection;>>Human papillomavirus infection;>>Human immunodeficiency virus 1 infection;>>Pathways in cancer;>>Proteoglycans in cancer;>>Chemical carcinogenesis - receptor activation;>>Colorectal cancer;>>Pancreatic cancer;>>Acute myeloid leukemia;>>Breast cancer;>>Hepatocellular carcinoma;>>Gastric cancer;>>Choline metabolism in cancer;>>PD-L1 expression and PD-1 checkpoint pathway in cancer |
| <b>Gene Name :</b>           | RPS6KB1 STK14A P70S6K  |
| <b>Protein Name :</b>        | Ribosomal protein S6 kinase beta-1   |
| <b>Human Gene Id :</b>       | 6198   |
| <b>Human Swiss Prot No :</b> | P23443   |
| <b>Mouse Gene Id :</b>       | 72508  |
| <b>Mouse Swiss Prot No :</b> | Q8BSK8   |
| <b>Rat Gene Id :</b>         | 83840  |
| <b>Rat Swiss Prot No :</b>   | P67999   |
| <b>Immunogen :</b>           | The antiserum was produced against synthesized peptide derived from human  |

p70 S6 Kinase around the phosphorylation site of Thr412. AA range:355-450

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**Specificity :** Phospho-p70 S6 kinase  $\alpha$  (T412) Polyclonal Antibody detects endogenous levels of p70 S6 kinase  $\alpha$  protein only when phosphorylated at T412.

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**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

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**Source :** Polyclonal, Rabbit,IgG

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**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.

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**Purification :** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

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**Concentration :** 1 mg/ml

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**Storage Stability :** -15°C to -25°C/1 year(Do not lower than -25°C)

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**Observed Band :** 60kD

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**Cell Pathway :** Regulates Angiogenesis; Insulin Receptor; ErbB/HER; mTOR; B Cell Receptor; PI3K/Akt; PI3K/Akt; AMPK

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**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],

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**Function :** 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.,

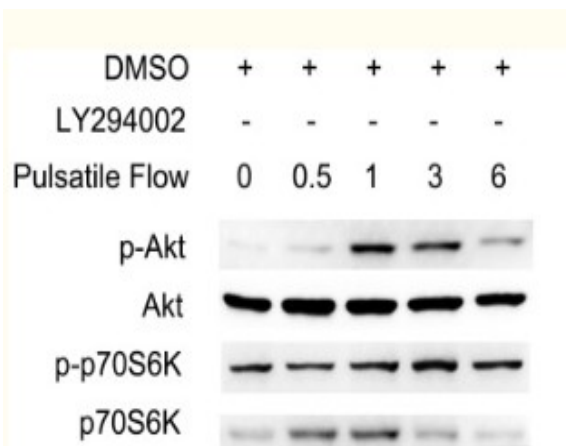
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**Subcellular** Cell junction, synapse, synaptosome . Mitochondrion outer membrane. Mitochondrion. Colocalizes with URI1 at mitochondrion.; [Isoform Alpha I]:

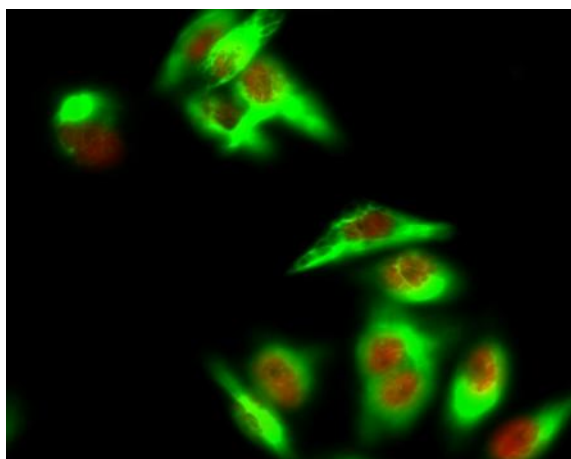
**Location :** Nucleus. Cytoplasm.; [Isoform Alpha II]: Cytoplasm.

**Expression :** Widely expressed.

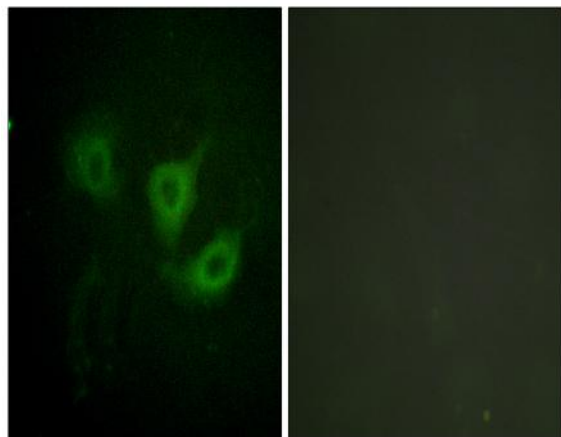
## Products Images



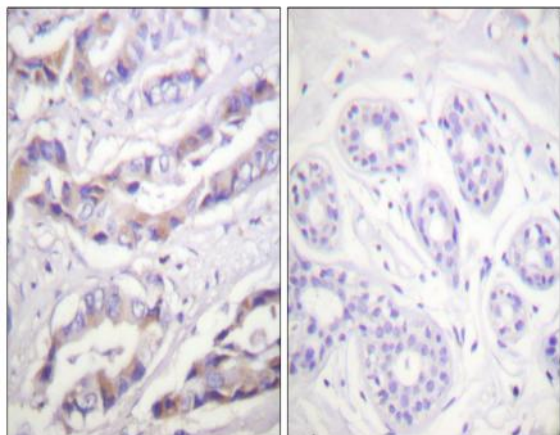
Ge, Cheng, et al. "Atheroprotective Pulsatile Flow Induces Ubiquitin-Proteasome-Mediated Degradation of Programmed Cell Death 4 in Endothelial Cells." *PloS one* 9.3 (2014): e91564.



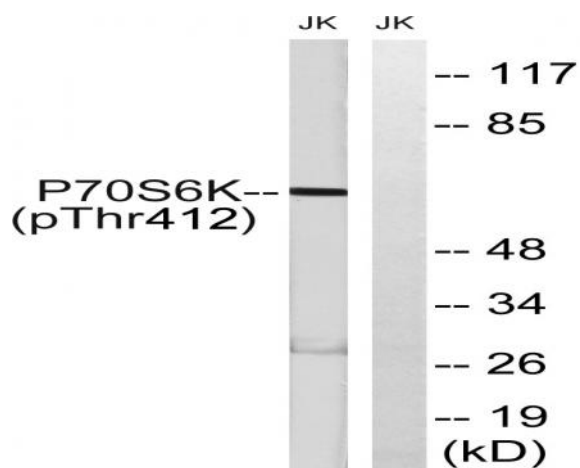
Immunofluorescence analysis of HeLa cell. 1, p70 S6 kinase  $\alpha$  (phospho Thr412) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). Active Caspase-3 Monoclonal Antibody (5E1) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000 (room temperature, 50min).



Immunofluorescence analysis of HUVEC cells, using p70 S6 Kinase (Phospho-Thr389) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using p70 S6 Kinase (Phospho-Thr389) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from Jurkat cells treated with Insulin 0.01U/ml 15', using p70 S6 Kinase (Phospho-Thr389) Antibody. The lane on the right is blocked with the phospho peptide.