

**p70 S6K Antibody**  
Catalog # ASM10399**Specification**

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**p70 S6K Antibody - Product Information**

|                   |                                  |
|-------------------|----------------------------------|
| Application       | <b>WB</b>                        |
| Primary Accession | <a href="#">Q9UBS0</a>           |
| Other Accession   | <a href="#">NP_003943.2</a>      |
| Host              | <b>Rabbit</b>                    |
| Reactivity        | <b>Human, Mouse, Rat, Bovine</b> |
| Clonality         | <b>Polyclonal</b>                |

**Description**

Rabbit Anti-Human p70 S6K Polyclonal

**Target/Specificity**

Detects ~70kDa.

**Other Names**

p70 S6 kinase beta (phospho T229) Antibody, p70-beta Antibody, p70S6Kb Antibody, S6K beta Antibody, S6K2 Antibody, SRK Antibody, STK14B Antibody

**Immunogen**

Human p70 S6K c-terminal peptide -KLH conjugates

**Purification**

Protein A Purified

Storage **-20°C****Storage Buffer**

TBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C****Certificate of Analysis**

0.25 mg/ml was sufficient for detection of SPC-146 in lysates prepared from mouse muscle and mouse brain.

**Cellular Localization**

Cytoplasm | Nucleus | Cell Junction | Mitochondrion | Mitochondrion Outer Membrane

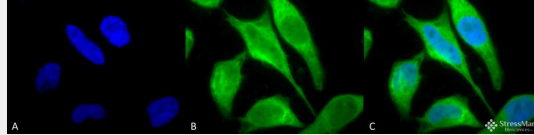
**p70 S6K Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

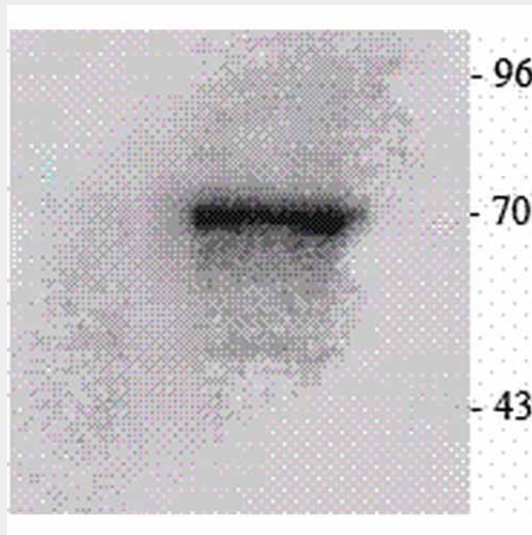
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

- [Flow Cytometry](#)
- [Cell Culture](#)

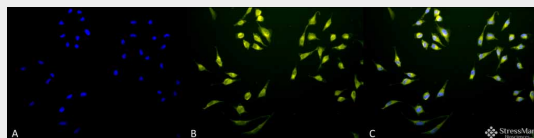
### p70 S6K Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-p70 S6K Polyclonal Antibody (ASM10399). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-p70 S6K Polyclonal Antibody (ASM10399) at 1:50 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Perinuclear region of cytoplasm. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-p70 S6K Antibody. (C) Composite.



Western blot analysis of Mouse brain cell lysates showing detection of p70 S6K protein using Rabbit Anti-p70 S6K Polyclonal Antibody (ASM10399). Primary Antibody: Rabbit Anti-p70 S6K Polyclonal Antibody (ASM10399) at 1:1000. Anti-p70 S6K Antibody on right, IP negative control on the left.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-p70 S6K Polyclonal Antibody (ASM10399). Tissue: HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-p70 S6K Polyclonal Antibody (ASM10399) at 1:50 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rabbit (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Cytoplasm. Perinuclear region of cytoplasm. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-p70 S6K Antibody. (C) Composite.

### p70 S6K Antibody - Background

Ribosomal S6 (S6K) belongs to the AGC family of Serine/Threonine protein kinases. There are two

forms of S6K, alpha and beta, which have cytoplasmic and nuclear variants derived from alternative splicing (1). The activity of S6K is regulated by phosphorylation/ dephosphorylation events in cellular responses to various extracellular stimuli. Its activity has also been shown to be dependent on nutrient availability (3-6). The mechanism of activation of S6K is a multi-step process which is achieved by phosphorylating the 40S ribosomal protein S6, which then upregulates the translation of mRNA transcripts containing an oligopyrimidine tract at the 5' transcriptional start site (3-6). Recently, a highly homologous ribosomal S6 kinase, termed S6K2, was identified. It has 70% amino acid identity in the overall sequence with S6K1, and highly conserved potential phosphorylation sites of S6K1. However, the N- and C-terminal domains of S6K2 are quite different (2). As a result, S6K is a key player in the regulation of cell size, growth and glucose homeostasis.

#### **p70 S6K Antibody - References**

1. Gout, I. et al. (1998). J Biol Chem. 273 (46):30061-30064.
2. Val'Ovka, TI. et al. (2000). Ukr Biokhim Zh. 72(3):31-7.
3. Kawasome, H. et al. (1998) Proc. Natl. Acad.Sci. 95
4. Montagne, J. et al. 1999) Science 285
5. Shima, H. et al. (1998) EMBO J 17: 6649-6659.
6. Lee-Fruman, K. et al. (1999) Oncogene 18: 5108- 5114.