

## Anti-p70 S6 Kinase (Ser398) Antibody

Our Anti-p70 S6 Kinase (Ser398) rabbit polyclonal phosphospecific primary antibody from PhosphoSolut
Catalog # AN1546

## **Specification**

## Anti-p70 S6 Kinase (Ser398) Antibody - Product Information

Primary Accession
Host
Clonality
Polyclonal
Isotype
H1ZYE3
Rabbit
Polyclonal

### Anti-p70 S6 Kinase (Ser398) Antibody - Additional Information

#### **Other Names**

70 kDa ribosomal protein S6 kinase 2 antibody, EC 2.7.11.1 antibody, KS6B2\_HUMAN antibody, p70 beta antibody, p70 ribosomal S6 kinase beta antibody, p70 S6 kinase beta antibody, p70 S6K-beta antibody, p70 S6KB antibody, p70 S6KB antibody, p70 S6KB antibody, p70-beta antibody, p70-S6K 2 antibody, P70S6K2 antibody, p70S6Kb antibody, Ribosomal protein S6 kinase 70kDa polypeptide 2 antibody, Ribosomal protein S6 kinase B2 antibody, Ribosomal protein S6 kinase beta 2 antibody, Ribosomal protein S6 kinase beta-2 antibody, Rps6kb2 antibody, S6 kinase related kinase antibody, S6 kinase-related kinase antibody, S6K-beta antibody, S6K-beta-2 antibody, S6K2 antibody, Serine/threonine protein kinase 14 beta antibody, S7K14B antibody

## Target/Specificity

p70 S6 kinase (p70 S6K) is activated in a signaling pathway that includes mTOR and is a mitogen-activated Ser/Thr protein kinase that is required for cell growth and G1 cell cycle progression (Xio et al., 2009). p70 S6K is controlled by multiple phosphorylation events located within the catalytic, linker and pseudosubstrate domains and subsequently phosphorylates specifically ribosomal protein S6 (Saitoh et al., 2002). Phosphorylation of Thr-229 in the catalytic domain and Thr-389 in the linker domain are most critical for kinase function. Inhibition of p70 activity inhibits the entry into S phase of the cell cycle and exhibits cell cycle arrest at G0/G1 phase, suggesting that the activation of p70 S6k plays an obligatory role in mediating mitogenic signals during cell activation (Xio et al., 2009).

#### **Format**

Antigen Affinity Purified from Pooled Serum

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Anti-p70 S6 Kinase (Ser398) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### **Shipping**

Blue Ice

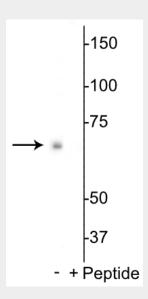


## Anti-p70 S6 Kinase (Ser398) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Anti-p70 S6 Kinase (Ser398) Antibody - Images



Western blot of Drosophila S2 cell lysate showing specific labeling of the ~70 kDa p70 S6K protein phosphorylated at Thr398 in the first lane (-). Immunolabeling is blocked by preadsorption with the phosphopeptide used as antigen in the second lane (+), but not by the corresponding non-phosphopeptide (not shown).

# Anti-p70 S6 Kinase (Ser398) Antibody - Background

p70 S6 kinase (p70 S6K) is activated in a signaling pathway that includes mTOR and is a mitogen-activated Ser/Thr protein kinase that is required for cell growth and G1 cell cycle progression (Xio et al., 2009). p70 S6K is controlled by multiple phosphorylation events located within the catalytic, linker and pseudosubstrate domains and subsequently phosphorylates specifically ribosomal protein S6 (Saitoh et al., 2002). Phosphorylation of Thr-229 in the catalytic domain and Thr-389 in the linker domain are most critical for kinase function. Inhibition of p70 activity inhibits the entry into S phase of the cell cycle and exhibits cell cycle arrest at G0/G1 phase, suggesting that the activation of p70 S6k plays an obligatory role in mediating mitogenic signals during cell activation (Xio et al., 2009).