

## Anti-p70 S6 Kinase (Ser398) Antibody

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

## **Product Information**

ApplicationWBPrimary AccessionH1ZYE3HostRabbitClonalityPolyclonalIsotypeIgG

## **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 S6Kbeta antibody, p70 S6KB antibody, p70 S6Kbeta 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 2 antibody, S6K beta antibody, S6K-beta antibody, S6K-beta-2 antibody, S6K2 antibody, Serine/threonine protein kinase 14 beta antibody, Serine/threonine-protein kinase 14B

antibody, SRK antibody, STK14B 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).

**Dilution** WB~~1:1000

**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

## **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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.