

Rabbit p70 S6 kinase alpha Polyclonal Antibody | anti-p70S6kinasealpha antibody

p70 S6 kinase alpha (phospho Ser418) Polyclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA294106	Rabbit	Human, Mouse, Rat	Immunofluorescence, Immunohistochemistry, Western Blot

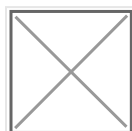
PRODUCT SYNONYMS

p70 S6 kinase alpha; Polyclonal Antibody; p70 S6 kinase alpha (phospho Ser418) Polyclonal Antibody; 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; anti-p70S6kinasealpha antibody

PRODUCT SPECIFICATIONS

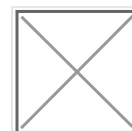
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Applicable Applications for anti-p70S6kinasealpha antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 2 weeks. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

IMAGES



WB (Western Blot)

Dilution: 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.



WB (Western Blot)

Dilution: 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.

ADDITIONAL INFORMATION

Related Product Information for anti-p70S6kinasealpha antibody	Serine/threonine-protein kinase that acts downstream of mTOR signaling in response to growth factors and nutrients to promote cell proliferation, cell growth and cell cycle progression. Regulates protein synthesis through phosphorylation of EIF4B, RPS6 and EEF2K, and contributes to cell survival by repressing the pro-apoptotic function of BAD. Under conditions of nutrient depletion, the inactive form associates with the EIF3 translation initiation complex. Upon mitogenic stimulation, phosphorylation by the mammalian target of rapamycin complex 1 (mTORC1) leads to dissociation from the EIF3 complex and activation. The active form then phosphorylates and activates several substrates in the pre-initiation complex, including the EIF2B complex and the cap-binding complex component EIF4B. Also controls translation initiation by phosphorylating a negative regulator of EIF4A, PDCD4, targeting it for ubiquitination and subsequent proteolysis. Promotes initiation of the pioneer round of protein synthesis by phosphorylating POLDIP3/SKAR. In response to IGF1, activates translation elongation by phosphorylating EEF2 kinase (EEF2K), which leads to its inhibition and thus activation of EEF2. Also plays a role in feedback regulation of mTORC2 by mTORC1 by phosphorylating RICTOR, resulting in the inhibition of mTORC2 and AKT1 signaling. Mediates cell survival by phosphorylating the pro-apoptotic protein BAD and suppressing its pro-apoptotic function. Phosphorylates mitochondrial URI1 leading to dissociation of a URI1-PPP1CC complex. The free mitochondrial PPP1CC can then dephosphorylate RPS6KB1 at Thr-412, which is proposed to be a negative feedback mechanism for the RPS6KB1 anti- apoptotic function. Mediates TNF-alpha-induced insulin resistance by phosphorylating IRS1 at multiple serine residues, resulting in accelerated degradation of IRS1. In cells lacking functional TSC1- 2 complex, constitutively phosphorylates and inhibits GSK3B. May be involved in cytoskeletal rearrangement through binding to neurabin. Phosphorylates and activates the pyrimidine biosynthesis enzyme CAD, downstream of MTOR (PubMed:12801526, PubMed:14673156, PubMed:15071500, PubMed:15341740, PubMed:16286006, PubMed:17052453, PubMed:17053147, PubMed:17936702, PubMed:18952604, PubMed:19085255, PubMed:19720745, PubMed:19935711, PubMed:19995915, PubMed:23429703). Following activation by mTORC1, phosphorylates EPRS and thereby plays a key role in fatty acid uptake by adipocytes and also most probably in interferon-gamma-induced translation inhibition (PubMed:28178239).
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NCBI AND UNIPROT INFORMATION

NCBI GI #	440546416
NCBI GeneID	6198
NCBI Accession #	NP_001258989.1
NCBI GenBank Nucleotide #	NM_001272060.1
UniProt Accession #	P23443
Molecular Weight	59,140 Da
NCBI Official Full Name	ribosomal protein S6 kinase beta-1 isoform e
NCBI Official Synonym Full Names	ribosomal protein S6 kinase, 70kDa, polypeptide 1
NCBI Official Symbol	RPS6KB1
NCBI Official Synonym Symbols	S6K; PS6K; S6K1; STK14A; p70-S6K; p70 S6KA; p70-alpha; S6K-beta-1; p70(S6K)-alpha
NCBI Protein Information	ribosomal protein S6 kinase beta-1; p70 S6 kinase, alpha; ribosomal protein S6 kinase I; serine/threonine kinase 14 alpha; serine/threonine-protein kinase 14A
UniProt Protein Name	Ribosomal protein S6 kinase beta-1
UniProt Gene Name	RPS6KB1
UniProt Synonym Gene Names	STK14A; S6K-beta-1; S6K1; P70S6K1; p70-S6K 1; p70 S6 kinase alpha; p70 S6K-alpha; p70 S6KA
UniProt Entry Name	KS6B1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.