



Phospho-RPS6KB1 (Ser371) Antibody

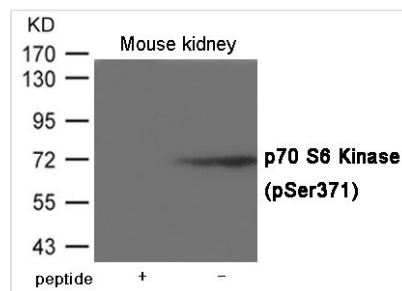
Product Code	CSB-PA061411
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P23443
Immunogen	Peptide sequence around serine 371 (V-D-S(p)-P-D) derived from Human p70 S6 Kinase.
Raised In	Rabbit
Species Reactivity	Human, Mouse, Rat
Specificity	The antibody detects endogenous level of p70 S6 Kinase only when phosphorylated at Serine 371.
Tested Applications	ELISA, WB; WB: 1:500-1:1000
Relevance	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 preinitiation 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.
Form	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide



and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using

Clonality	Polyclonal
Alias	S6K, PS6K, S6K1, STK14A, p70-S6K
Product Type	Polyclonal Antibody
Species	Homo sapiens (Human)
Target Names	RPS6KB1

Image



Western blot analysis of extracts from Mouse kidney tissue using p70 S6 Kinase (Ser371) Antibody. The lane on the left is treated with the antigen-specific peptide.

Product Modify	Phospho-Ser371
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