## RPS6KB1 Rabbit pAb

Swiss-Prot No.:	P23443
Altername:	RPS6KB1
Storage/Stability:	Store at -20°C. Avoid freeze / thaw cycles.
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 361-525 of human RPS6KB1 (NP_003152.1).
Purification:	Affinity purified
Reactivity:	Human
Other Names:	S6K; PS6K; S6K1; STK14A; p70-S6K; p70 S6KA; p70-alpha; S6K-beta-1; p70(S6K)-alpha
Cellular localization:	Cell junction, Cytoplasm, Membrane, Mitochondrion, Mitochondrion outer membrane, Nucleus, Synapse, Synaptosome
	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

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Relevance:	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 capbinding 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 antiapoptotic 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.
Source:	Rabbit
Antibody type:	Polyclonal antibody
lsotype:	Rabbit IgG
Molecular Weight:	51kDa/52kDa/56kDa/59kDa

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Preservative:	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Recommended Dilutions:	IF 1:50 - 1:200(Optimal dilutions should be determined by the end user)