Ribosomal protein S6 kinase beta-2 Polyclonal Antibody

Catalog No: #42378

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Description

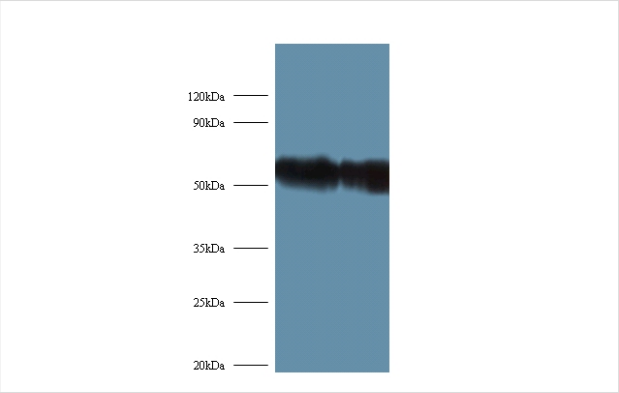
Product Name	Ribosomal protein S6 kinase beta-2 Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Caprylic Acid Ammonium Sulfate Precipitation purified
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total Ribosomal protein S6 kinase beta-2 polyclonal antibody.
Immunogen Type	protein
Immunogen Description	Recombinant human Ribosomal protein S6 kinase beta-2 protein
Target Name	Ribosomal protein S6 kinase beta-2
Other Names	STK14B??RPS6KB2???70 kDa ribosomal protein S6 kinase 2??P70S6K2??p70-S6K 2??S6 kinase-related kinase??SRK??Serine/threonine-protein kinase 14B??p70 ribosomal S6 kinase beta??S6K-beta??p70 S6 kinase beta??p70 S6K-beta??p70 S6KB??p70-beta??S6K-beta-2??S6K2
Accession No.	Swiss-Prot#: Q9UBS0
Uniprot	Q9UBS0
GeneID	6199;
Calculated MW	53kd
Formulation	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Storage	Store at -20°C

Application Details

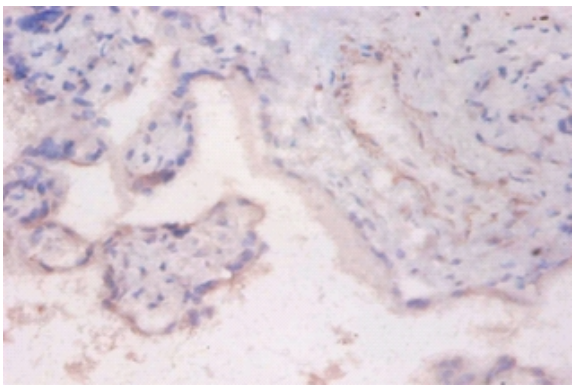
Western blotting: 1:500 - 1:1000

Immunohistochemistry: 1:20 - 1:200

Images



All lanes : Ribosomal protein S6 kinase beta-2 antibody at 2ug/ml Lane 1 : EC109 whole cell lysate Lane 2 : 293T whole cell lysate Secondary Goat polyclonal to Rabbit IgG at 1/15000 dilution Predicted band size : 53 kDa Observed band size: 53 kDa



Immunohistochemical analysis of paraffin-embedded human placenta using #42378 at dilution of 1:100 .

Background

Acts to integrate nutrient and growth factor signals in regulation of protein synthesis, cell proliferation, cell growth, cell cycle progression and cell survival. Downstream effector of the mTOR signaling pathway. Phosphorylates specifically ribosomal protein S6 in response to insulin or several classes of mitogens. During translation initiation, the inactive form associatess with the eIF-3 complex under conditions of nutrient depletion. Mitogenic stimulation leads to phosphorylation and dissociation from the eIF-3 complex and the free activated form can phosphorylate other translational targets including EIF4B. Promotes protein synthesis by phosphorylating PDCD4 at 'Ser-67' and targeting it for degradation. Phosphorylates RICTOR leading to regulation of mammalian target of rapamycin complex 2 (mTORC2) signaling; probably phosphorylates RICTOR at 'Thr-1135'. Phosphorylates IRS1 at multiple serine residues coupled with insulin resistance; probably phosphorylates IRS1 at 'Ser-270'. Required for TNF-alpha induced IRS-1 degradation. Phosphorylates EEF2K in response to IGF1 and inhibits EEF2K activity. Phosphorylates BAD at 'Ser-99' in response to IGF1 leading to BAD inactivation and inhibition of BAD-induced apoptosis. Phosphorylates mitochondrial RMP leading to dissociation of a RMP:PPP1CC complex; probably phosphorylates RMP at 'Ser-99'. The free mitochondrial PPP1CC can dephosphorylate RPS6KB1 at Thr-412 which is proposed to be a negative feed back mechanism for the RPS6KB1 antiapoptotic function. Phosphorylates GSK3B at 'Ser-9' under conditions leading to loss of the TSC1-TSC2 complex. Phosphorylates POLDIP3.

References

[1]"Molecular cloning and characterization of a novel p70 S6 kinase, p70 S6 kinase beta containing a proline-rich region."Gout I., Minami T., Hara K., Tsujishita Y., Filonenko V., Waterfield M.D., Yonezawa K.J. Biol. Chem. 273:30061-30064(199

Note: This product is for in vitro research use only