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RPS6KB1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant RPS6KB1.
Catalog # AT3722a

Product Information

Application	WB, IF, E
Primary Accession	P23443
Other Accession	NM_003161
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG IgA IgM Mix
Clone Names	1E11
Calculated MW	59140

Additional Information

Gene ID	6198
Other Names	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 kinase alpha, p70 S6K-alpha, p70 S6KA, RPS6KB1, STK14A
Target/Specificity	RPS6KB1 (NP_003152, 416 a.a. ~ 525 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	RPS6KB1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

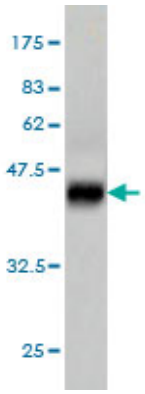
Background

This gene encodes a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinases. This kinase contains 2 non-identical kinase catalytic domains and phosphorylates several residues of the S6 ribosomal protein. The kinase activity of this protein leads to an increase in protein synthesis and cell proliferation. Amplification of the region of DNA encoding this gene and overexpression of this kinase are seen in some breast cancer cell lines. Alternate translational start sites have been described and alternate transcriptional splice variants have been observed but have not been thoroughly characterized.

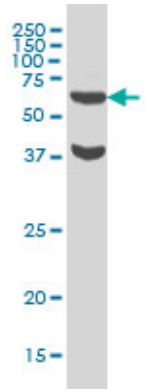
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.S6K1 is acetylated at lysine 516 in response to growth factor stimulation. Fenton TR, et al. Biochem Biophys Res Commun, 2010 Jul 30. PMID 20599721.P70S6K 1 regulation of angiogenesis through VEGF and HIF-1alpha expression. Bian CX, et al. Biochem Biophys Res Commun, 2010 Jul 30. PMID 20599538.Osteopontin selectively regulates p70S6K/mTOR phosphorylation leading to NF-kappaB dependent AP-1-mediated ICAM-1 expression in breast cancer cells. Ahmed M, et al. Mol Cancer, 2010 May 7. PMID 20459645.Targeting p70S6K prevented lung metastasis in a breast cancer xenograft model. Akar U, et al. Mol Cancer Ther, 2010 May. PMID 20423989.

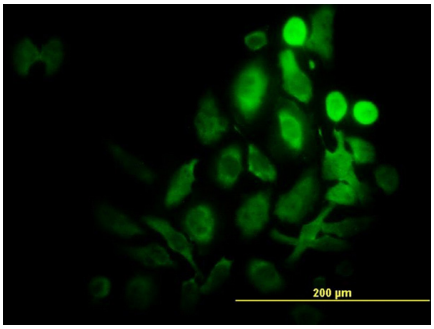
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .

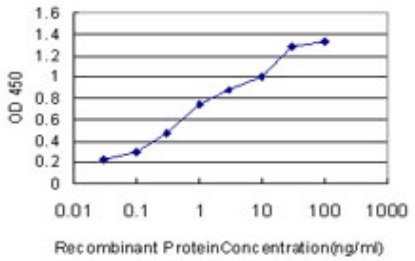


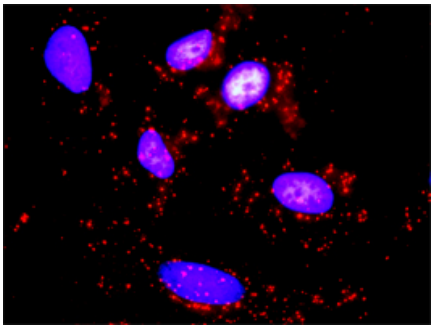
RPS6KB1 monoclonal antibody (M02), clone 1E10 Western Blot analysis of RPS6KB1 expression in HeLa ((Cat # AT3722a)



Immunofluorescence of monoclonal antibody to RPS6KB1 on HeLa cell. [antibody concentration 60 ug/ml]

Detection limit for recombinant GST tagged RPS6KB1 is approximately 0.03ng/ml as a capture antibody.





Proximity Ligation Analysis of protein-protein interactions between STK11 and RPS6KB1 HeLa cells were stained with anti-STK11 rabbit purified polyclonal 1:1200 and anti-RPS6KB1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

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