Best Tools for immunology Research

Rsk-2 Monoclonal Antibody

Catalog No :	YM0565
Reactivity :	Human
Applications :	WB;IF;FCM;ELISA
Target :	RSK2
Fields :	>>MAPK signaling pathway;>>Oocyte meiosis;>>mTOR signaling pathway;>>Thermogenesis;>>Long-term potentiation;>>Neurotrophin signaling pathway;>>Progesterone-mediated oocyte maturation;>>Insulin resistance;>>Yersinia infection;>>Chemical carcinogenesis - receptor activation
Gene Name :	RPS6KA3
Protein Name :	Ribosomal protein S6 kinase alpha-3
Human Gene Id :	6197
Human Swiss Prot No :	P51812
Mouse Swiss Prot No :	P18654
Immunogen :	Purified recombinant fragment of human Rsk-2 expressed in E. Coli.
Specificity :	Rsk-2 Monoclonal Antibody detects endogenous levels of Rsk-2 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. IF 1:200 - 1:1000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 84kD

Cell Pathway : Regulates Angiogenesis; Insulin Receptor; B Cell Receptor; AMPK

P References :

1. Mol Cell. 2009 Jan 16;33(1):109-16.
2. Cancer Res. 2009 May 15;69(10):4398-406.

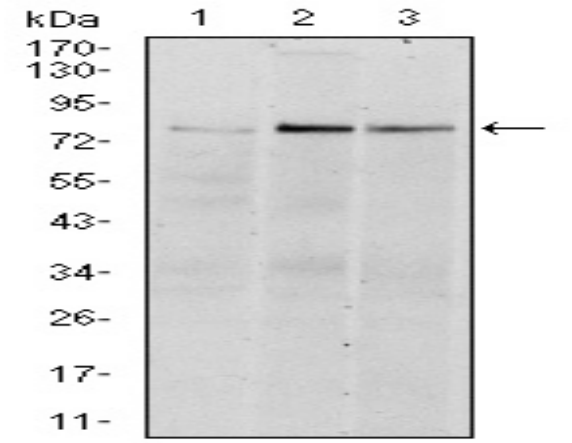
Background : ribosomal protein S6 kinase A3(RPS6KA3) Homo sapiens This gene encodes a member of the RSK (ribosomal S6 kinase) family of serine/threonine kinases. This kinase contains 2 non-identical kinase catalytic domains and phosphorylates various substrates, including members of the mitogen-activated kinase (MAPK) signalling pathway. The activity of this protein has been implicated in controlling cell growth and differentiation. Mutations in this gene have been associated with Coffin-Lowry syndrome (CLS). [provided by RefSeq, Jul 2008],

Function : catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,disease:Defects in RPS6KA3 are the cause of Coffin-Lowry syndrome (CLS) [MIM:303600]; an X-linked dominant disorder characterized by severe mental retardation with facial and digital dysmorphisms, and progressive skeletal deformations.,enzyme regulation:Activated by multiple phosphorylations on threonine and serine residues.,function:Serine/threonine kinase that may play a role in mediating the growth-factor and stress induced activation of the transcription factor CREB.,PTM:Autophosphorylated on Ser-386, as part of the activation process.,PTM:Ser-227 phosphorylation promotes Ser-386 phosphorylation and leads to basal activation. Full activation by growth factors requires additional phosphorylation on Ser-369.,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase

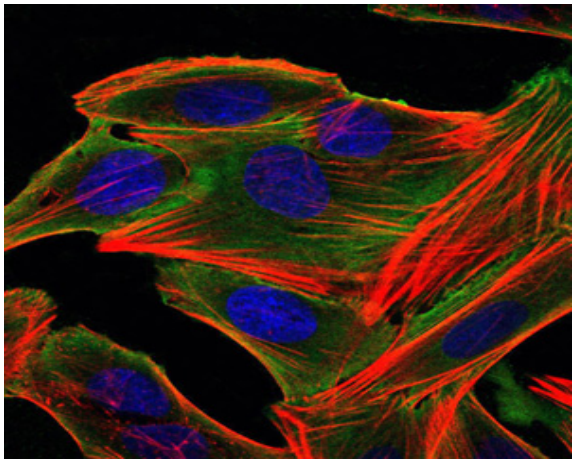
Subcellular Location : Nucleus . Cytoplasm .

Expression : Expressed in many tissues, highest levels in skeletal muscle.

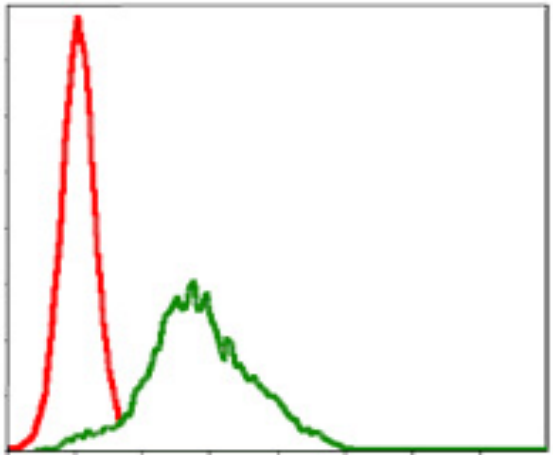
Products Images



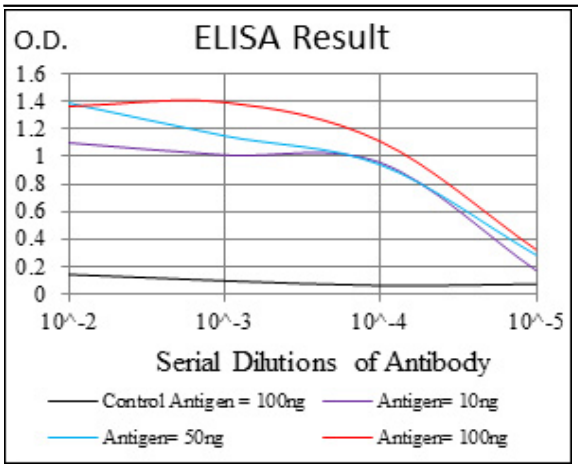
Western Blot analysis using Rsk-2 Monoclonal Antibody against HeLa (1), MCF-7 (2), and HepG2 (3) cell lysate.



Immunofluorescence analysis of HepG2 cells using Rsk-2 Monoclonal Antibody (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow cytometric analysis of HepG2 cells using Rsk-2 Monoclonal Antibody (green) and negative control (red).


O.D.
ELISA Result
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
10^-2
10^-3
10^-4
10^-5
Serial Dilutions of Antibody
Control Antigen = 100ng
Antigen= 10ng
Antigen= 50ng
Antigen= 100ng