

## Rsk-2 Monoclonal Antibody

<b>Catalog No :</b>	YM0565
<b>Reactivity :</b>	Human
<b>Applications :</b>	WB;IF;FCM;ELISA
<b>Target :</b>	RSK2
<b>Fields :</b>	>>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
<b>Gene Name :</b>	RPS6KA3
<b>Protein Name :</b>	Ribosomal protein S6 kinase alpha-3
<b>Human Gene Id :</b>	6197
<b>Human Swiss Prot No :</b>	P51812
<b>Mouse Swiss Prot No :</b>	P18654
<b>Immunogen :</b>	Purified recombinant fragment of human Rsk-2 expressed in E. Coli.
<b>Specificity :</b>	Rsk-2 Monoclonal Antibody detects endogenous levels of Rsk-2 protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Monoclonal, Mouse
<b>Dilution :</b>	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.
<b>Purification :</b>	Affinity purification
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

**Molecularweight :** 84kD

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

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

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**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],

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**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

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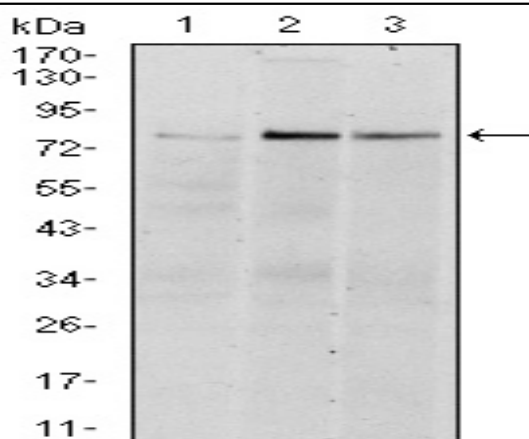
**Subcellular Location :** Nucleus . Cytoplasm .

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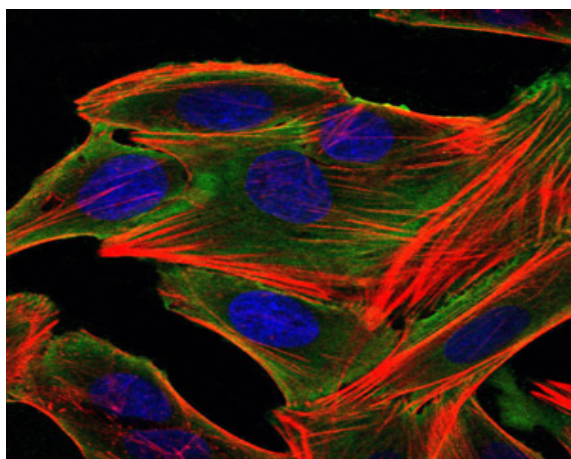
**Expression :** Expressed in many tissues, highest levels in skeletal muscle.

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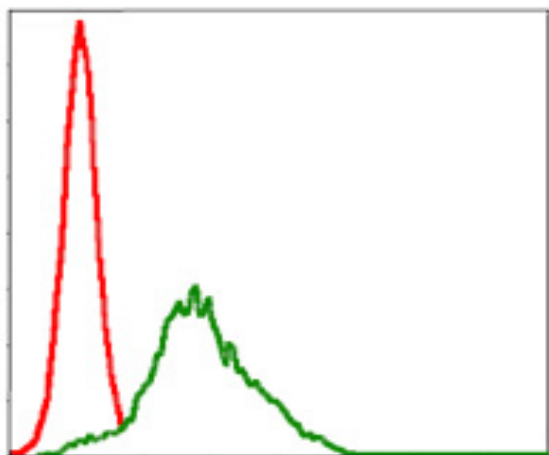
## Products Images



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).

