

## **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

P51812

P18654

Human Gene Id: 6197

**Human Swiss Prot** 

No:

**Mouse Swiss Prot** 

No:

**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)

1/4

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:

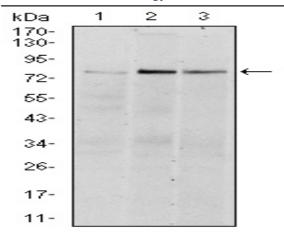
Nucleus . Cytoplasm .

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

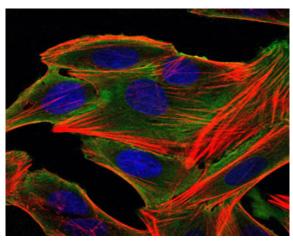
**Sort :** 14629

No4: 1

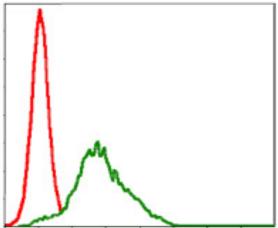
## **Products Images**



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).

