

Akt3 Monoclonal Antibody

Catalog No: YM0020

Reactivity: Human

Applications: WB;ELISA

Target: Akt3

Fields: >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine

resistance;>>Platinum drug resistance;>>MAPK signaling pathway;>>ErbB signaling pathway;>>Ras signaling pathway;>>CAMP-PKG signaling pathway;>>cAMP signaling pathway;>>Chemokine signaling pathway;>>HIF-1 signaling pathway;>>FoxO signaling pathway;>>Sphingolipid signaling pathway;>>Phospholipase D signaling pathway;>>Autophagy - animal;>>mTOR signaling pathway;>>Pl3K-Akt signaling pathway;>>AMPK signaling pathway;>>Apoptosis;>>Longevity regulating pathway;>>Longevity regulating pathway - multiple species;>>Cellular senescence;>>Adrenergic signaling in cardiomyocytes;>>VEGF signaling pathway;>>Apelin signaling pathway:>>Osteoclast differentiation:>>Focal adhesion:>>Signaling pathways

extracellular trap formation;>>Toll-like receptor signaling pathway;>>C-type lectin receptor signaling pathway;>>T cell recept

regulating pluripotency of stem cells;>>Platelet activation;>>Neutrophil

Gene Name: AKT3

Protein Name: RAC-gamma serine/threonine-protein kinase

Human Gene Id: 10000

Human Swiss Prot Q9Y243

No:

Mouse Swiss Prot Q9WUA6

No:

Immunogen: Purified recombinant fragment of Akt3 expressed in E. Coli.

Specificity: Akt3 Monoclonal Antibody detects endogenous levels of Akt3 protein.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

1/3



Source: Monoclonal, Mouse

Dilution: WB 1:500 - 1:2000. 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)

Observed Band: 56kD

Cell Pathway: Regulation_Microtubule; Stem cell pathway; T_Cell_Receptor; Regulates

Angiogenesis; Insulin Receptor; Toll_Like; ErbB/HER; AMPK;

MAPK ERK Growth; MAPK G Protein; B Cell Antigen; Adherens Junction;

PI3K

P References: 1. Rachael M. Easton, Han Cho, Kristin Roovers. Mol. Cell. Biol., Mar 2005; 25:

1869 - 1878

2. Jill M. Stahl, Arati Sharma, Mitchell Cheung, Cancer Res., Oct 2004; 64:

7002-7010.

Background: The protein encoded by this gene is a member of the AKT, also called PKB,

serine/threonine protein kinase family. AKT kinases are known to be regulators of cell signaling in response to insulin and growth factors. They are involved in a wide variety of biological processes including cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. This kinase has been shown to be stimulated by platelet-derived growth factor (PDGF), insulin, and insulin-like growth factor 1 (IGF1). Alternatively splice

transcript variants encoding distinct isoforms have been described. [provided by

RefSeq, Jul 2008],

Function: catalytic activity:ATP + a protein = ADP + a phosphoprotein.,domain:Binding of

the PH domain to the phosphatidylinositol 3-kinase alpha (PI(3)K) results in its targeting to the plasma membrane.,enzyme regulation:Two specific sites, one in the kinase domain (Thr-305) and the other in the C-terminal regulatory region (Ser-472), need to be phosphorylated for its full activation.,function:IGF-1 leads to the activation of AKT3, which may play a role in regulating cell survival. Capable of phosphorylating several known proteins. Truncated isoform 2/PKB gamma 1 without the second serine phosphorylation site could still be stimulated but to a lesser extent.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the

protein kinase superfamily. AGC Ser/Thr protein kinase family. RAC

subfamily., similarity: Contains 1 AG

Subcellular Location:

Nucleus . Cytoplasm . Membrane ; Peripheral membrane protein . Membrane-

associated after cell stimulation leading to its translocation.

In adult tissues, it is highly expressed in brain, lung and kidney, but weakly in



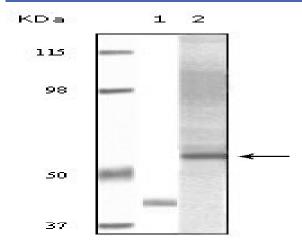
Expression: heart, testis and liver. In fetal tissues, it is highly expressed in heart, liver and

brain and not at all in kidney.

Sort : 1871

No4: 1

Products Images



Western Blot analysis using Akt3 Monoclonal Antibody against truncated Akt3 recombinant protein (1) and human ovary carcinoma tissue lysate (2).