Best Tools for immunology Research

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;>>Rap1 signaling pathway;>>cGMP-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;>>PI3K-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 regulating pluripotency of stem cells;>>Platelet activation;>>Neutrophil extracellular trap formation;>>Toll-like receptor signaling pathway;>>C-type lectin receptor signaling pathway;>>JAK-STAT signaling pathway;>>T cell recept
Gene Name :	AKT3
Protein Name :	RAC-gamma serine/threonine-protein kinase
Human Gene Id :	10000
Human Swiss Prot No :	Q9Y243
Mouse Swiss Prot No :	Q9WUA6
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.

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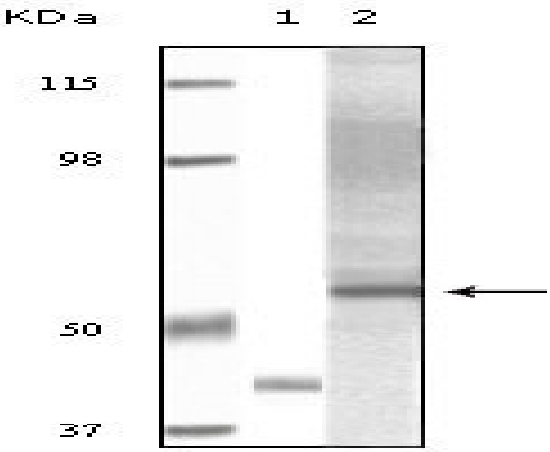
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	56kD
Cell Pathway :	Regulation_Microtubule; Stem cell pathway; T_Cell_Receptor; 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.

Products Images



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