



Akt3 Monoclonal Antibody

Catalog No	YP-Ab-14115
Isotype	IgG
Reactivity	Human
Applications	WB;ELISA
Gene Name	AKT3
Immunogen	Purified recombinant fragment of Akt3 expressed in E. Coli.
Specificity	Akt3 Monoclonal Antibody detects endogenous levels of Akt3 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Akt3;RAC-gamma serine/threonine-protein kinase;PKBG;Protein kinase Akt-3; Protein kinase B gamma;PKB gamma;RAC-PK-gamma;STK-2
Observed Band	56kD
Calculated Molecular Weight	56kD
Cell Pathway	Nucleus . Cytoplasm . Membrane ; Peripheral membrane protein . Membrane-associated after cell stimulation leading to its translocation.
Tissue Specificity	In adult tissues, it is highly expressed in brain, lung and kidney, but weakly in heart, testis and liver. In fetal tissues, it is highly expressed in heart, liver and brain and not at all in kidney.
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

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],

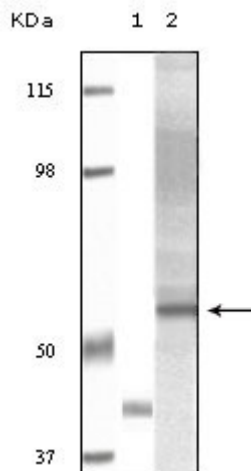
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



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