PRODUCT DATA SHEET

Akt1 Monoclonal Antibody

Catalog No.	IMB0211
Reactivity	Human;Mouse;Rat;Bovine;Chicken;Pig
Applications	WB
Gene Name	AKT1
Protein Name	RAC-alpha serine/threonine-protein kinase
Human Gene Id	207
Swiss-Prot	P31749
Formulation	PurIF:ied mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with 0.2% sodium azide, 50% glycerol.
Source	Monoclonal, Mouse
Dilution	WB: 1:1000-1:2000
PurIF:ication	Affinity purIF:ication
Concentration	1 mg/ml
Storage&Stability	-20°C/1 year
Background	The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specIF:ic, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Mutations in this gene have been associated with the Proteus syndrome. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Jul 2011]
Subcellular Location.	Cytoplasm. Nucleus. Cell membrane. Nucleus after activation by integrin-linked protein kinase 1 (ILK1). Nuclear translocation is enhanced by interaction with TCL1A. Phosphorylation on Tyr-176 by TNK2 results in its localization to the cell membrane where it is targeted for further phosphorylations on Thr-308 and Ser-473 leading to its activation and the activated form translocates to the nucleus. Colocalizes with WDFY2 in intracellular vesicles (PubMed:16792529).
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Products Images:

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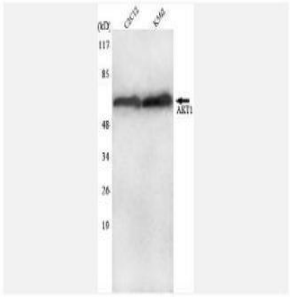

Western Blot analysis using Akt1 Monoclonal Antibody against C2C12, K562 cell lysate.