

PRODUCT DATA SHEET

AKT mouse Monoclonal Antibody(1H2)

Catalog No.	IMB0208
Reactivity	Human
Applications	WB; IHC-p
Gene Name	AKT1/AKT2/AKT3
Protein Name	AKT1
Human Gene Id	207
Swiss-Prot	P31749
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse
Dilution	WB: 1:1000-2000 IHC: 1:100-200
PurIF:ication	The antibody was affinity-purIF:ied from mouse ascites by affinity-
	chromatography using specIF:ic immunogen.
Concentration	1 mg/ml
Storage&Stability	-20°C/1 year
Background	The serine-threonine protein kinase encoded by the AKT1 gene is catalytically

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.

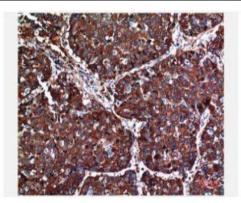
Cytoplasm. Nucleus. Cell membrane. Nucleus after activation by integrinlinked protein kinase 1 (ILK1). Nuclear translocation is enhanced by interaction with TCL1A. Phosphorylation on Tyr-176 by TNK2 results in its localization to the cell membrane where it is targeted for further phosphorylations on 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).

BiowMW

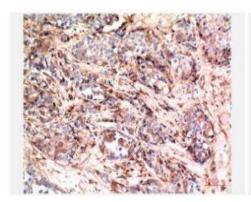
Products Images:



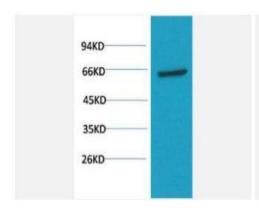
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Immunohistochemical analysis of paraffin-embedded Human Lung Carcinoma Tissue using Akt Mouse mAb diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human Breast Carcinoma Tissue using Akt Mouse mAb diluted at 1:200.



Western blot analysis of PC3 Cell Lysate using Akt Mouse mAb diluted at 1:1000.