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Datasheet

AKT1 polyclonal antibody

Catalog Number: PAB9932

Regulation Status: For research use only (RUO)

Product Description: Sheep polyclonal antibody raised against synthetic peptide of AKT1.

Immunogen: A synthetic peptide corresponding to internal region of human AKT1.

Host: Sheep

Reactivity: Chicken,Human,Mouse,Rat

Applications: ELISA, WB
(See our web site product page for detailed applications information)

Protocols: See our web site at http://www.abnova.com/support/protocols.asp or product page for detailed protocols

Form: Liquid

Recommend Usage: ELISA (1:5000-1:20000)
Western Blot (1:500-1:2000)
The optimal working dilution should be determined by the end user.

Storage Buffer: In 20 mM KH_2PO_4, 150 mM NaCl, pH 7.2 (0.1% sodium azide)

Storage Instruction: Store at 4°C. For long term storage store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 207

Gene Symbol: AKT1

Gene Alias: AKT, MGC99656, PKB, PKB-ALPHA, PRKBA, RAC, RAC-ALPHA

Gene Summary: 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 specific, 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. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq]

References:

1. BCR-tyrosine 177 plays an essential role in Ras and Akt activation and in human hematopoietic progenitor transformation in chronic myelogenous leukemia. Chu S, Li L, Singh H, Bhatia R. Cancer Res. 2007 Jul 15;67(14):7045-53.
2. Regulation of mammalian target of rapamycin activity in PTEN-inactive prostate cancer cells by I kappa B kinase alpha. Dan HC, Adli M, Baldwin AS. Cancer Res. 2007 Jul 1;67(13):6263-9.
3. AKT1 amplification regulates cisplatin resistance in human lung cancer cells through the mammalian target of rapamycin/p70S6K1 pathway. Liu LZ, Zhou XD, Qian G, Shi X, Fang J, Jiang BH. Cancer Res. 2007 Jul 1;67(13):6325-32.