

## Akt (phospho Tyr315) rabbit pAb

Cat No.: ES5165

For research use only

## Overview

Product Name Akt (phospho Tyr315) rabbit pAb

Host species Rabbit

**Applications** IHC;IF;WB;ELISA **Species Cross-Reactivity** Human;Mouse;Rat

Recommended dilutions WB 1:500-2000 Immunohistochemistry: 1/100 -

1/300. ELISA: 1/20000. Not yet tested in other

applications.

Immunogen The antiserum was produced against synthesized

peptide derived from human AKT1/2/3 around the

phosphorylation site of Tyr315/316/312. AA

range:281-330

**Specificity** Phospho-Akt (Y315) Polyclonal Antibody detects

endogenous levels of Akt protein only when

phosphorylated at Y315.

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and

0.02% sodium azide.

**Storage** Store at -20°C. Avoid repeated freeze-thaw cycles.

**Protein Name** RAC-alpha serine/threonine-protein

kinase/RAC-beta serine/threonine-protein

kinase/RAC-gamma serine/threonine-protein kinase

Gene Name AKT1/AKT2/AKT3

**Cellular localization** 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 whe

Purification The antibody was affinity-purified from rabbit

antiserum by affinity-chromatography using

epitope-specific immunogen.

ClonalityPolyclonalConcentration1 mg/mlObserved band56kD

Human Gene ID 207/208/10000



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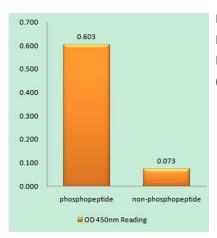


Human Swiss-Prot Number Alternative Names P31749/P31751/Q9Y243

AKT1; PKB; RAC; RAC-alpha serine/threonine-protein kinase; Protein kinase B; PKB; Protein kinase B alpha; PKB alpha; Proto-oncogene c-Akt; RAC-PK-alpha; AKT2; RAC-beta serine/threonine-protein kinase; Protein kinase Akt-2; Protein kinase B

**Background** 

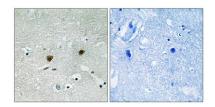
The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin 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. 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]



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using AKT1/2/3 (Phospho-Tyr315/316/312) Antibody







Immunohistochemistry analysis of paraffin-embedded human brain, using AKT1/2/3 (Phospho-Tyr315/316/312) Antibody. The picture on the right is blocked with the phospho peptide.



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