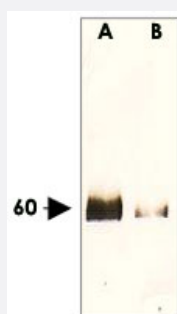


AKT1 (phospho S473) polyclonal antibody

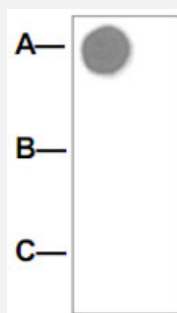
Catalog # PAB12600 Size 100 ug

Applications



Western Blot (Cell lysate)

The whole cell lysate derived from PDGF stimulated NIH/3T3 was immunoprobed by AKT1 (phospho S473) polyclonal antibody (Cat # PAB12600) at 1 : 1000. An immunoreactive band was observed around ~ 60 KDa (A). This band is abolished by pre-incubation with immunizing peptide (B).



Dot Blot (Peptide)

Dot Blot : 1 ug peptide was blot onto NC membrane (A-Phospho-AKT1 S473 ; B-AKT1 (Nonphospho) ; C : Non-related Phosphopeptide) was blotted by AKT1 (phospho S473) polyclonal antibody (Cat # PAB12600) at a 1 : 2000 dilution.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of AKT1.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding S473 of human AKT1.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	The motif corresponding to the major autophosphorylation site of the human AKT1. This antibody does not cross react to the non-phosphorylated AKT1 or with other unrelated phosphorylated serine. Ser 473 corresponds to QFSYS in human, rat, mouse, chicken and canis of AKT/PKB proteins.
Form	Liquid

Quality Control Testing

Antibody Reactive Against Synthetic Peptide.

Recommend Usage

Western Blot (0.1-0.2 ug/mL)
ELISA (0.01-0.1 ug/mL)
Immunoprecipitation (2-5 ug/mL)
Immunohistochemistry (1-2 ug/mL)
The optimal working dilution should be determined by the end user.

Storage Buffer

In TBS, pH 7.2 (BSA, 10% Proclin300)

Storage Instruction

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

Applications

- Western Blot (Cell lysate)

The whole cell lysate derived from PDGF stimulated NIH/3T3 was immunoprobed by AKT1 (phospho S473) polyclonal antibody (Cat # PAB12600) at 1 : 1000. An immunoreactive band was observed around ~ 60 KDa (A). This band is abolished by pre-incubation with immunizing peptide (B).

- Immunohistochemistry

- Immunoprecipitation

- Enzyme-linked Immunoabsorbent Assay

- Dot Blot (Peptide)

Dot Blot : 1 ug peptide was blot onto NC membrane (A-Phospho-AKT1 S473 ; B-AKT1 (Nonphospho) ; C : Non-related Phosphopeptide) was blotted by AKT1 (phospho S473) polyclonal antibody (Cat # PAB12600) at a 1 : 2000 dilution.

Gene Info — AKT1

Entrez GeneID[207](#)**Gene Name**

AKT1

Gene Alias

AKT, MGC99656, PKB, PKB-ALPHA, PRKBA, RAC, RAC-ALPHA

Gene Description

v-akt murine thymoma viral oncogene homolog 1

Omim ID[164730](#) [181500](#)**Gene Ontology**[Hyperlink](#)

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]

Other Designations

RAC-alpha serine/threonine-protein kinase|murine thymoma viral (v-akt) oncogene homolog-1|protein kinase B|rac protein kinase alpha

Pathway

- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Apoptosis](#)
- [B cell receptor signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Glioma](#)
- [Insulin signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)

- [mTOR signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Renal cell carcinoma](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)
- [Toll-like receptor signaling pathway](#)
- [VEGF signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Amphetamine-Related Disorders](#)
- [Atherosclerosis](#)
- [Basal Ganglia Diseases](#)
- [Bipolar Disorder](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cognition](#)
- [Colonic Neoplasms](#)

- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Depressive Disorder](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Dominance](#)
- [Drug Toxicity](#)
- [Dyskinesia](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [Leukemia](#)
- [Liver Cirrhosis](#)
- [Lung Neoplasms](#)
- [Memory](#)
- [Metabolic Syndrome X](#)
- [Necrosis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuropsychological Tests](#)

- [Obesity](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Parkinson disease](#)
- [Polycystic Ovary Syndrome](#)
- [Precursor T-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Prostatic Neoplasms](#)
- [Psychiatric Status Rating Scales](#)
- [Psychoses](#)
- [Psychotic Disorders](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Schizophrenia](#)
- [Space Perception](#)
- [Thrombophilia](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Verbal Learning](#)
- [Werner syndrome](#)