

AKT1 (phospho T308) polyclonal antibody

Catalog # PAB9963

Size 100 ug

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of AKT1.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding T308 of human AKT1.
Host	Rabbit
Reactivity	Human
Specificity	This antibody is specific to phosphorylated human AKT. Minimal reactivity occurs against non-phosphorylated AKT.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:20000-1:70000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Enzyme-linked Immunoabsorbent Assay

Gene Info — AKT1

Entrez GeneID	207
Protein Accession#	P31749;AAH00479
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

Publication Reference

- [Akt1 contains a functional leucine-rich nuclear export sequence.](#)

Saji M, Vasko V, Kada F, Allbritton EH, Burman KD, Ringel MD.

Biochemical and Biophysical Research Communications 2005 Jun; 332(1):167.

- [Akt phosphorylates the Y-box binding protein 1 at Ser102 located in the cold shock domain and affects the anchorage-independent growth of breast cancer cells.](#)

Sutherland BW, Kucab J, Wu J, Lee C, Cheang MC, Yorida E, Turbin D, Dedhar S, Nelson C, Pollak M, Leighton Grimes H, Miller K, Badve S, Huntsman D, Blake-Gilks C, Chen M, Pallen CJ, Dunn SE.

Oncogene 2005 Jun; 24(26):4281.

- [PKB mediates c-erbB2-induced epithelial beta1 integrin conformational inactivation through Rho-independent F-actin rearrangements.](#)

Hedjazifar S, Jenndahl LE, Shimokawa H, Baeckstrom D.

Experimental Cell Research 2005 Jul; 307(1):259.

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](#)