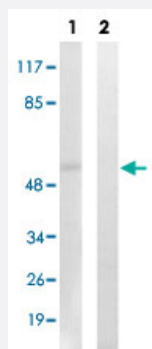


AKT1/AKT3 (phospho Y437/Y434) polyclonal antibody

Catalog # PAB29638

Size 100 uL

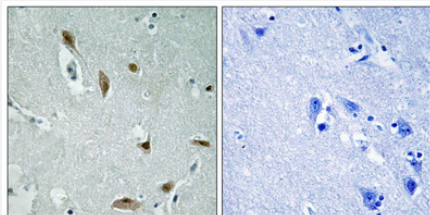
Applications



Western Blot (Cell lysate)

Western blot analysis of Lane 1: Untreated K562 cell lysates, Lane 2: Synthesized peptide treated K562 cell lysates reacted with AKT1/AKT3 (phospho Y437/Y434) polyclonal antibody (Cat # PAB29638) at 1:500-1:3000 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)



Immunohistochemical staining of paraffin-embedded human brain tissue reacted with AKT1/AKT3 (phospho Y437/Y434) polyclonal antibody (Cat # PAB29638) at 1:50-1:100 dilution. The picture on the right is treated with the synthesized peptide.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of human AKT1/AKT3.
Immunogen	Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding Y437/Y434 of human AKT1/AKT3.
Host	Rabbit
Theoretical MW (kDa)	56
Reactivity	Human, Mouse, Rat

Specificity	AKT1/AKT3 (phospho Y437/Y434) polyclonal antibody detects endogenous levels of human AKT1/AKT3 only when phosphorylated at tyrosine 437 and tyrosine 434.
Form	Liquid
Purification	Affinity chromatography
Recommend Usage	Immunohistochemistry (1:50-1:100) Western Blot (1:500-1:3000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (without Mg ²⁺ and Ca ²⁺), 150 mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	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

- Western Blot (Cell lysate)

Western blot analysis of Lane 1: Untreated K562 cell lysates, Lane 2: Synthesized peptide treated K562 cell lysates reacted with AKT1/AKT3 (phospho Y437/Y434) polyclonal antibody (Cat # PAB29638) at 1:500-1:3000 dilution.

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical staining of paraffin-embedded human brain tissue reacted with AKT1/AKT3 (phospho Y437/Y434) polyclonal antibody (Cat # PAB29638) at 1:50-1:100 dilution. The picture on the right is treated with the synthesized peptide.

Gene Info — AKT1

Entrez GeneID	207
Protein Accession#	P31749;Q9Y243
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

Gene Info — AKT3

Entrez GeneID

[10000](#)

Protein Accession#

[P31749;Q9Y243](#)

Gene Name

AKT3

Gene Alias

DKFZp434N0250, PKB-GAMMA, PKBG, PRKBG, RAC-PK-gamma, RAC-gamma, STK-2

Gene Description

v-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma)

Omim ID

[611223](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the AKT, also called PKB, serine/threonine protein kinase family. AKT kinases are known to be regulators of cell signaling in response to insulin and growth factors. They are involved in a wide variety of biological processes including cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. This kinase has been shown to be stimulated by platelet-derived growth factor (PDGF), insulin, and insulin-like growth factor 1 (IGF1). Alternatively splice transcript variants encoding distinct isoforms have been described. [provided by RefSeq]

Other Designations

OTTHUMP00000037911|OTTHUMP00000037912|RAC-gamma serine/threonine protein kinase|protein kinase B gamma|serine threonine protein kinase, Akt-3|v-akt murine thymoma viral oncogene homolog 3

Pathway

- [Acute myeloid leukemia](#)
- [Acute myeloid leukemia](#)

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

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

- [Toll-like receptor signaling pathway](#)
- [VEGF signaling pathway](#)
- [VEGF signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Amphetamine-Related Disorders](#)
- [Atherosclerosis](#)
- [Basal Ganglia Diseases](#)
- [Bipolar Disorder](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cognition](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Depressive Disorder](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)

- [Disease Susceptibility](#)
- [Dominance](#)
- [Drug Toxicity](#)
- [Dyskinesia](#)
- [Edema](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [HIV Infections](#)
- [Leukemia](#)
- [Liver Cirrhosis](#)
- [Lung Neoplasms](#)
- [Memory](#)
- [Metabolic Syndrome X](#)
- [Multiple Sclerosis](#)
- [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](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Verbal Learning](#)
- [Werner syndrome](#)