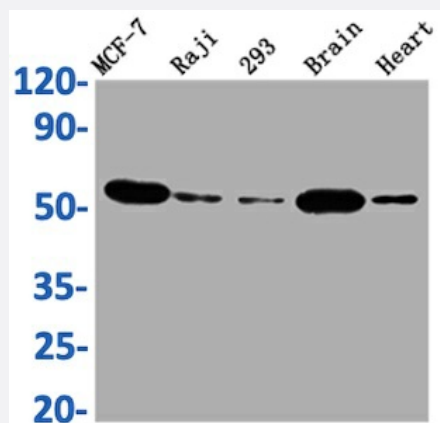


RecomAb™

AKT1 recombinant monoclonal antibody, clone 4B6

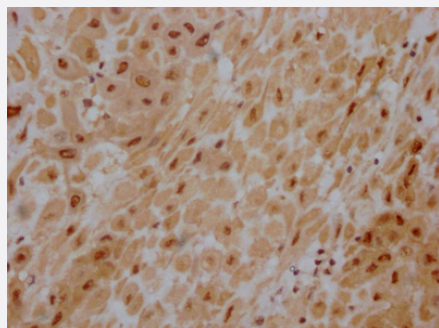
Catalog # RAB04140 Size 100 uL

Applications



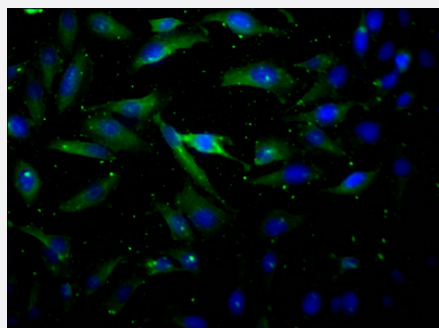
Western Blot

Western Blot analysis of Lane 1: MCF-7 whole cell lysate; Lane 2: Raji whole cell lysate; Lane 3: 293 whole cell lysate; Lane 4: Mouse brain tissue; Lane 5: Rat heart tissue.



Immunohistochemistry

Immunohistochemistry image of AKT1 recombinant monoclonal antibody, clone 4B6 diluted at 1:100 and staining in paraffin-embedded human placenta tissue performed on a Leica Bond™ system.



Immunofluorescence

Immunofluorescence staining of HeLa Cells with AKT1 recombinant monoclonal antibody, clone 4B6 at 1:50, counter-stained with DAPI.

Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human, mouse and rat AKT1.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against recombinant protein corresponding to full length human AKT1.
Reactivity	Human, Mouse, Rat
Form	Liquid
Purification	Affinity-chromatography
Isotype	IgG
Recommend Usage	ELISA Immunohistochemistry (1:50-1:200) Immunofluorescence(1:20-1:200) Western Blot (1:500-1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, pH7.4 (150 mM NaCl, 50% glycerol and 0.02% sodium azide)
Storage Instruction	Store at -20°C or -80°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

Western Blot analysis of Lane 1: MCF-7 whole cell lysate; Lane 2: Raji whole cell lysate; Lane 3: 293 whole cell lysate; Lane 4: Mouse brain tissue; Lane 5: Rat heart tissue.

- Immunohistochemistry

Immunohistochemistry image of AKT1 recombinant monoclonal antibody, clone 4B6 diluted at 1:100 and staining in paraffin-embedded human placenta tissue performed on a Leica Bond™ system.

- Immunofluorescence

Immunofluorescence staining of Hela Cells with AKT1 recombinant monoclonal antibody, clone 4B6 at 1:50, counter-stained with DAPI.

- Enzyme-linked Immunoabsorbent Assay

Gene Info — AKT1

Entrez GeneID [207](#)

Protein Accession# [P31749](#)

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](#)