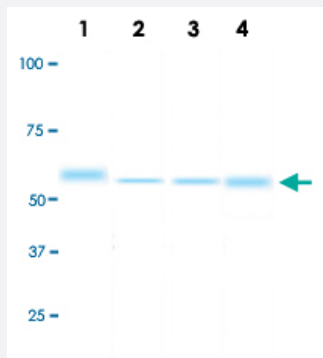


AKT1 monoclonal antibody, clone C20-A

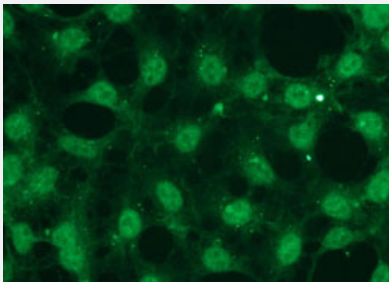
Catalog # MAB15914 Size 50 uL

Applications



Western Blot

Western Blot analysis of Lane 1: AKT1 recombinant protein and mouse brain tissue lysate (Lane 2: 20 ug, Lane 3: 100 ug and Lane 4: 200 ug) with AKT1 monoclonal antibody, clone C20-A (Cat # MAB15914).



Immunocytochemistry

Immunocytochemical staining of HEK293 cells with AKT1 monoclonal antibody, clone C20-A (Cat # MAB15914) at 1:300 dilution.

Specification

Product Description	Rabbit monoclonal antibody raised against synthetic peptide of human AKT1.
Immunogen	A synthetic peptide corresponding to amino acids 462-478 at C-terminus of human AKT1.
Host	Rabbit
Reactivity	Human, Mouse
Form	Liquid
Purification	EVAC purification

Isotype	IgG
Recommend Usage	ELISA (1:100000-1:200000) Immunocytochemistry Immunoprecipitation Western Blot (1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM Tris-HCl buffer, pH 8.0 (10 mg/mL BSA, 0.05% 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

Western Blot analysis of Lane 1: AKT1 recombinant protein and mouse brain tissue lysate (Lane 2: 20 ug, Lane 3: 100 ug and Lane 4: 200 ug) with AKT1 monoclonal antibody, clone C20-A (Cat # MAB15914).

- Immunocytochemistry

Immunocytochemical staining of HEK293 cells with AKT1 monoclonal antibody, clone C20-A (Cat # MAB15914) at 1:300 dilution.

- Immunoprecipitation

- 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

Publication Reference

- [Neuroprotective effects of the anticancer drug NVP-BEZ235 \(dactolisib\) on amyloid- \$\beta\$ 1-42 induced neurotoxicity and memory impairment.](#)

Bellozi PM, Lima IV, Dória JG, Vieira ÉL, Campos AC, Candelario-Jalil E, Reis HJ, Teixeira AL, Ribeiro FM, de Oliveira AC. Scientific Reports 2016 May; 6:25226.

Application: WB-Ti, Mouse, Hippocampus

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](#)