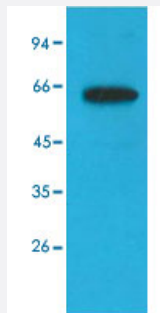


# AKT1 (phospho S473) monoclonal antibody, clone 6F8

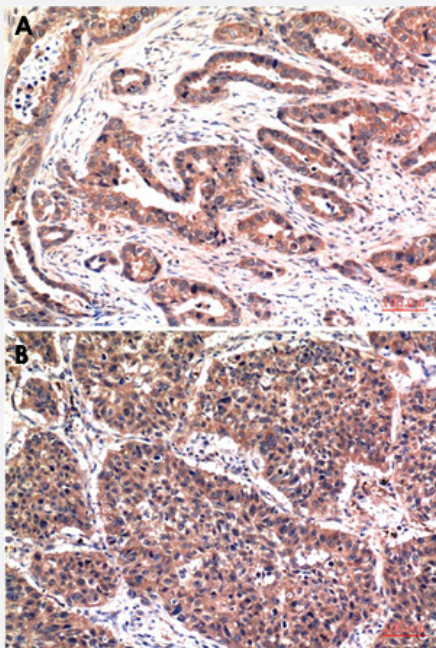
Catalog # MAB15184      Size 100 uL

## Applications



### Western Blot (Cell lysate)

Western Blot (Cell lysate) analysis of PC-3 cell lysate.



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

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of (A) human lung carcinoma and (B) human breast carcinoma.

## Specification

|                            |                                                                                    |
|----------------------------|------------------------------------------------------------------------------------|
| <b>Product Description</b> | Mouse monoclonal antibody raised against synthetic phosphopeptide of human AKT1.   |
| <b>Immunogen</b>           | Synthetic phosphopeptide corresponding to residues surrounding S473 of human AKT1. |
| <b>Host</b>                | Mouse                                                                              |

|                     |                                                                                                                                                                                      |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity          | Human                                                                                                                                                                                |
| Form                | Liquid                                                                                                                                                                               |
| Purification        | Affinity purification                                                                                                                                                                |
| Isotype             | IgG1                                                                                                                                                                                 |
| Recommend Usage     | Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (1:100-200)<br>Western Blot (1:1000-2000)<br>The optimal working dilution should be determined by the end user. |
| Storage Buffer      | In PBS (50% glycerol, 0.5% BSA and 0.02% sodium azide).                                                                                                                              |
| Storage Instruction | Store at -20°C.<br>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 (Cell lysate) analysis of PC-3 cell lysate.

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

Immunohistochemical staining (Formalin-fixed paraffin-embedded sections) of (A) human lung carcinoma and (B) human breast carcinoma.

## Gene Info — AKT1

|                  |                                                      |
|------------------|------------------------------------------------------|
| Entrez GeneID    | <a href="#">207</a>                                  |
| 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          | <a href="#">164730</a> <a href="#">181500</a>        |
| Gene Ontology    | <a href="#">Hyperlink</a>                            |

**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](#)