# Akt(Ab-473) Antibody

**Catalog No:** #21054

**Package Size:** #21054-1 50ul  #21054-2 100ul  #21054-4 25ul

## Description

- **Product Name:** Akt(Ab-473) Antibody
- **Host Species:** Rabbit
- **Clonality:** Polyclonal
- **Purification:** Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.

## Applications

- **WB IHC**

## Species Reactivity

- **Hu Ms**

## Specificity

The antibody detects endogenous level of total Akt protein.

## Immunogen Type

Peptide-KLH

## Immunogen Description

Peptide sequence around aa. 471~475 (Q-F-S-Y-S) derived from Human Akt.

## Target Name

Akt

## Other Names

AKT; C-AKT; PKB; PKB-alpha; RAC

## Accession No.

- Swiss-Prot: P31749
- NCBI Protein: NP_001014431.1

## Concentration

1.0mg/ml

## Formulation

Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

## Storage

Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

## Application Details

- **Predicted MW:** 60kd
- **Western blotting:** 1:500~1:1000
- **Immunohistochemistry:** 1:50~1:100

## Images

Western blot analysis of extracts from 293 and 3T3 cells using Akt(Ab-473) Antibody #21054.
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using Akt(Ab-473) Antibody #21054(left) or the same antibody preincubated with blocking peptide(right).

Background

General protein kinase capable of phosphorylating several known proteins. Phosphorylates TBC1D4. Signals downstream of phosphatidylinositol 3-kinase (PI3K) to mediate the effects of various growth factors such as platelet-derived growth factor (PDGF), epidermal growth factor (EGF), insulin and insulin-like growth factor I (IGF-I). Plays a role in glucose transport by mediating insulin-induced translocation of the GLUT4 glucose transporter to the cell surface. Mediates the antiapoptotic effects of IGF-I. Mediates insulin-stimulated protein synthesis by phosphorylating TSC2 at 'Ser-939' and 'Thr-1462', thereby activating mTORC1 signaling and leading to both phosphorylation of 4E-BP1 and in activation of RPS6KB1. Promotes glycogen synthesis by mediating the insulin-induced activation of glycogen synthase.


Published Papers

PMID:20378243

PMID:19767100

Massimo Nabissi, Maria Beatrice Morelli1, Consuelo Amantini el at., TRPV2 channel negatively controls glioma cell proliferation and resistance to Fas-induced apoptosis in ERK-dependent manner. Carcinogenesis, 31(5):794-803(2010)
PMID:20093382

Nan Li, Xiaodong Bu, Peng Wu el at., The B'B:B'B:HER2'B'PI3K/Akt'B'FASN Axis—B'B—Regulated Malignant Phenotype of Colorectal Cancer Cells. Lipids, 47:403'B'411(2012)
PMID:22218925

PMID:21148485

PMID:23727026
Note: This product is for in vitro research use only and is not intended for use in humans or animals.