

# AKT1(Ab-450) Antibody

Catalog No: #21502



Package Size: #21502-1 50ul #21502-2 100ul #21502-4 25ul

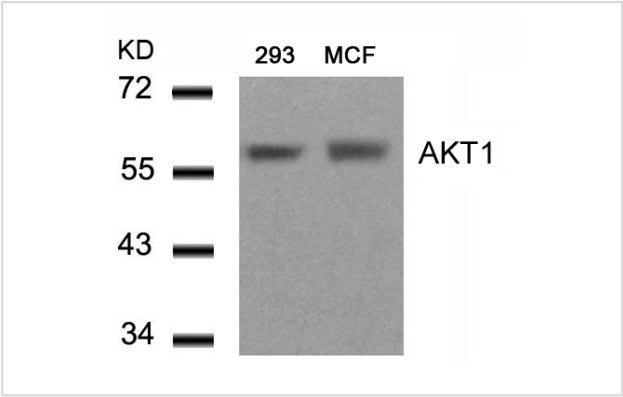
## Overview

Product Name	AKT1(Ab-450) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Immunogen Type	Peptide-KLH
Target Name	AKT1
Alternative Names	RAC-PK-alpha; Protein kinase B;

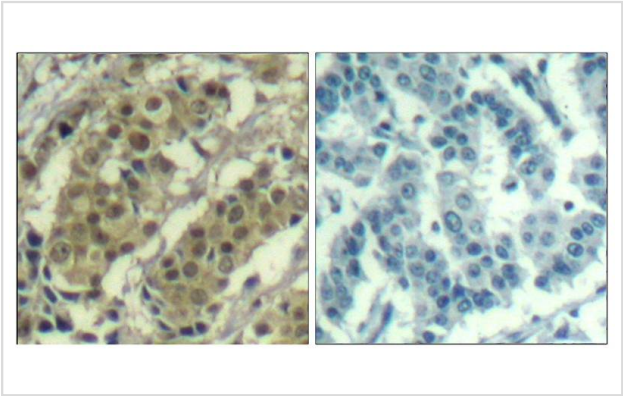
## Application Details

Predicted MW: 60kd
Western blotting: 1:500~1:1000
Immunohistochemistry: 1:50~1:100
Immunofluorescence: 1:100~1:200

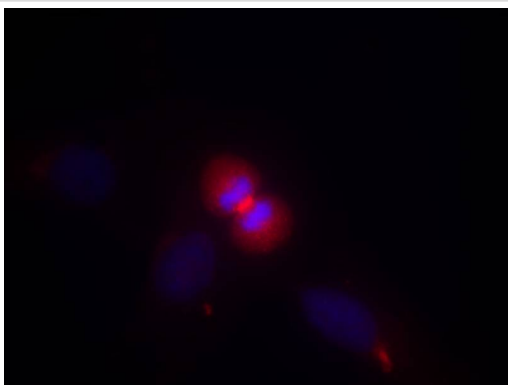
## Images



Western blot analysis of extracts from 293 and MCF cells using AKT1(Ab-450) Antibody #21502.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using AKT1(Ab-450) Antibody #21502(left) or the same antibody preincubated with blocking peptide(right).



Immunofluorescence staining of methanol-fixed HeLa cells using AKT1(Ab-450) Antibody #21502.

## Descriptions

Immunogen	Peptide sequence around aa.448~452 (T-I-T-P-P) derived from Human AKT1.
Specificity	The antibody detects endogenous level of total AKT1 protein.
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), 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.
Accession NO.	Swiss-Prot: P31749 NCBI Protein: NP_001014431.1

## Related Information

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.

Xing J, et al. (1998) Mol Cell Biol 18(4): 1946-55.

Tan Y, et al. (1996) EMBO J; 15(17): 4629-42.

Hao, M. et al. (1996) J. Biol. Chem. 271, 29380-29385.

Mayo LD, et al. (2001) Biol Chem; 276(27): 25184-9.

Lu, H. et al. (1997) Mol. Cell. Biol. 17, 5923-5934.

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