

Akt(Ab-473) Antibody

Catalog No: #21054

Package Size: #21054-1 50ul #21054-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

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 IF
Species Reactivity	Hu Ms Rt
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: P31749NCBI Protein: NP_001014431.1
Uniprot	P31749
GeneID	207;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), 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.

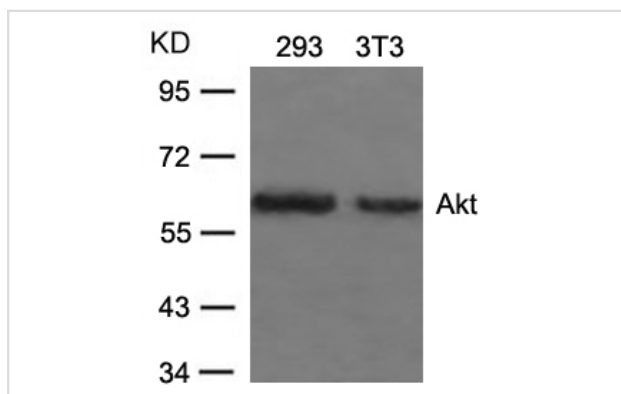
Application Details

Predicted MW: 60kd

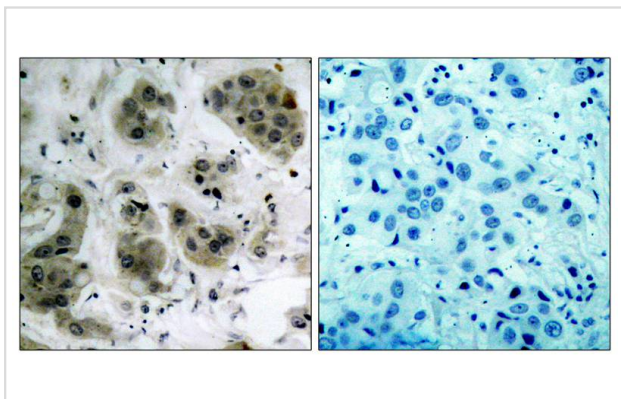
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

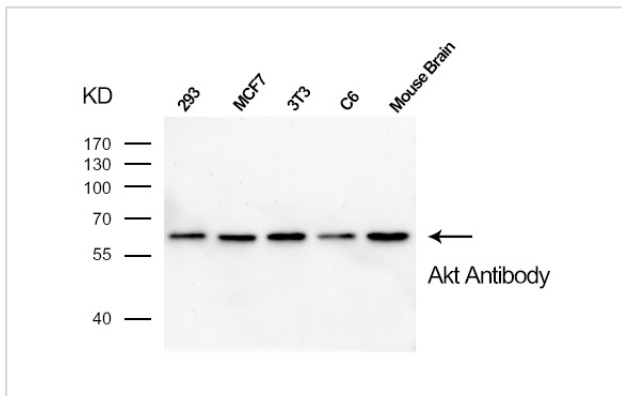
Images



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).



Western blot analysis of extracts of various cell lines, using Akt(Ab-473) #21054

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.

Baudhuin LM, et al. (2004) FASEB J Feb; 18(2): 341-3.

Min YH, et al. (2004) Cancer Res; 64(15): 5225-31.

Feng J, et al. (2004) J Biol Chem; 279(34): 35510-7.

Ayala G, et al. (2004) Clin Cancer Res; 10(19): 6572-8.

Lungu AO, et al. (2004) J Biol Chem; 279(47): 48794-800.

Note: This product is for in vitro research use only