

For Research Use Only

# AKT Polyclonal antibody

Catalog Number: 55230-1-AP

4 Publications



## Basic Information

<b>Catalog Number:</b> 55230-1-AP	<b>GenBank Accession Number:</b> NM_001014431	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 450 µg/ml by Nanodrop and 307 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 207	<b>Recommended Dilutions:</b> WB 1:500-1:1000 IHC 1:50-1:500
<b>Source:</b> Rabbit	<b>Full Name:</b> v-akt murine thymoma viral oncogene homolog 1	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 56 kDa	
	<b>Observed MW:</b> 56-62 kDa	

## Applications

<b>Tested Applications:</b> IHC, WB, ELISA	<b>Positive Controls:</b> WB : HeLa cells, A549 cells
<b>Cited Applications:</b> WB	<b>IHC :</b> human breast cancer tissue, human prostate cancer tissue
<b>Species Specificity:</b> human, Mouse	
<b>Cited Species:</b> human, rat, mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

AKT1, also named as PKB and RAC, belongs to the protein kinase superfamily, AGC Ser/Thr protein kinase family and RAC subfamily. It plays a role as a key modulator of the AKT-mTOR signaling pathway controlling the tempo of the process of newborn neurons integration during adult neurogenesis, including correct neuron positioning, dendritic development and synapse formation. AKT1 promotes glycogen synthesis by mediating the insulin-induced activation of glycogen synthase. It plays a role in glucose transport by mediating insulin-induced translocation of the GLUT4 glucose transporter to the cell surface. AKT1 mediates the antiapoptotic effects of IGF-I. (PMID:16139227) This antibody is specific to AKT1. It has no cross reaction to AKT2 and AKT3.

## Notable Publications

Author	Pubmed ID	Journal	Application
Yuwen Wang	29845189	Mol Med Rep	WB
Lu Lu Li	35688466	J Immunol	WB
Meng Zhao	37739107	J Ethnopharmacol	WB

## Storage

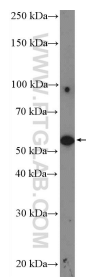
**Storage:**  
Store at -20°C.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

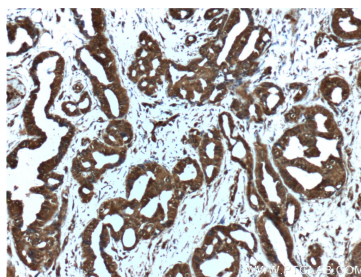
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
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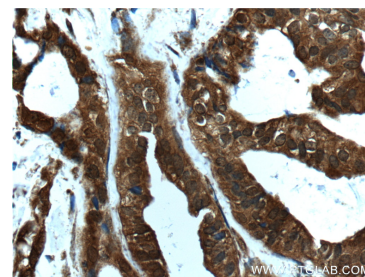
## Selected Validation Data



HeLa cells were subjected to SDS PAGE followed by western blot with 55230-1-AP (AKT1 Antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 55230-1-AP (AKT1 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 55230-1-AP (AKT1 Antibody) at dilution of 1:200 (under 40x lens).