For Research Use Only

AKT Polyclonal antibody

Catalog Number:55230-1-AP 4 Publications

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Basic Information

Catalog Number:
55230-1-AP

Size:
450 μg/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_001014431

GeneID (NCBI):
207

UNIPROT ID:
P31749

Full Name:
v-akt murine thymoma viral oncogene homolog 1

Calculated MW:
56 kDa

Observed MW:
56-62 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:50-1:500

Applications

Tested Applications:
IHC, WB, ELISA

Cited Applications:
WB

Species Specificity:
human, Mouse

Cited Species:
human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : HeLa cells, A549 cells

IHC : human breast cancer tissue, human prostate cancer tissue

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

For technical support and original validation data for this product please contact:
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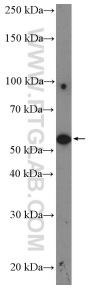
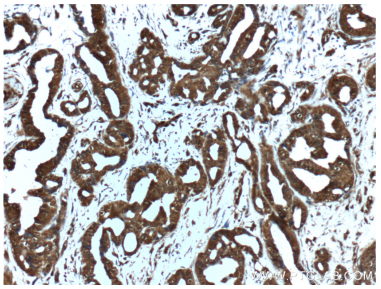
This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

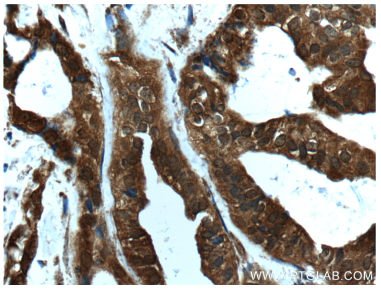
Selected Validation Data



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).