

For Research Use Only

AKT Polyclonal antibody

Catalog Number: 51077-1-AP

Featured Product

26 Publications



Basic Information

Catalog Number:

51077-1-AP

Size:

150ul, Concentration: 900 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC084538

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 1:1000-1:8000

IHC 1:20-1:200

IF/ICC 1:10-1:100

Applications

Tested Applications:

WB, IF, IHC, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human

Cited Species:

human, mouse, rat

Positive Controls:

WB : A431 cells, MCF-7 cells, A549 cells, COLO 320 cells, HeLa cells, Jurkat cells

IHC : human breast cancer tissue, human cervical cancer tissue

IF/ICC : HeLa cells,

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

Background Information

The serine-threonine protein kinase AKT1 is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery.

Notable Publications

Author	Pubmed ID	Journal	Application
Kedi Liu	34582494	PLoS One	WB
Yuquan Bai	30216488	J Cell Biochem	WB
Hexiao Tang	30216513	J Cell Biochem	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

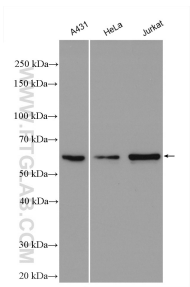
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

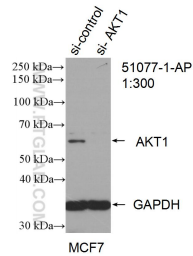
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

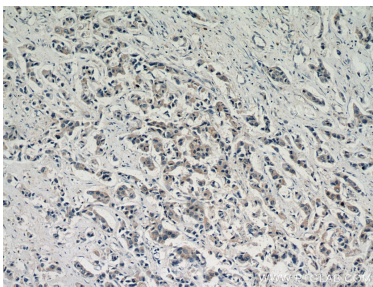
Selected Validation Data



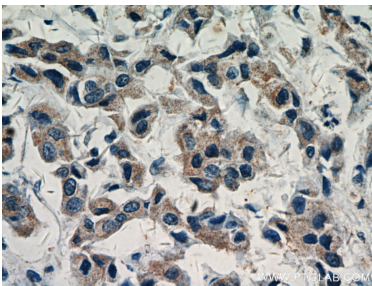
Various lysates were subjected to SDS PAGE followed by western blot with 51077-1-AP (AKT1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



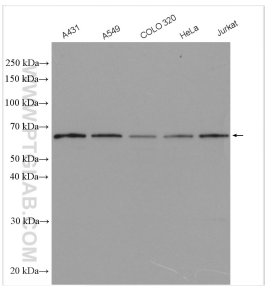
WB result of AKT1 antibody (51077-1-AP; 1:300; incubated at room temperature for 1.5 hours) with sh-Control and sh-AKT1 transfected MCF-7 cells.



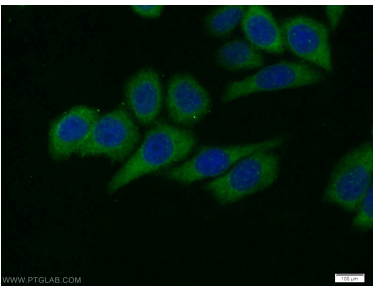
Immunohistochemical analysis of paraffin-embedded human breast cancer using 51077-1-AP (AKT1 antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human breast cancer using 51077-1-AP (AKT1 antibody) at dilution of 1:50 (under 40x lens).



Various lysates were subjected to SDS PAGE followed by western blot with 51077-1-AP (AKT1 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of HeLa cells using 51077-1-AP (AKT1 antibody) at dilution of 1:25 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).