## For Research Use Only

# AKT Polyclonal antibody

Catalog Number: 51077-1-AP

**Featured Product** 

27 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 51077-1-AP BC084538

Concentration: GeneID (NCBI): 900 µg/ml 207

Source: UNIPROT ID:

Rabbit P31749
Isotype: Full Name:

gG 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

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: 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,

# 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.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

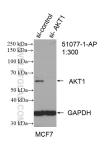
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

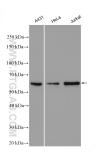
W: ptgcn.cor

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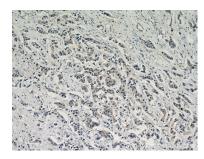
# **Selected Validation Data**



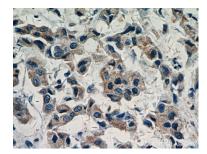
WB result of AKT1 antibody (51077-1-AP; 1:300; incubated at room temperature for 1.5 hours) with sh-Control and sh-AKT1 transfected MCF-7 cells.



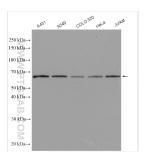
Various lysates were subjected to SDS PAGE followed by western blot with 51077-1-AP (AKT1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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



Immunohistochemical analysis of paraffinembedded 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).