

For Research Use Only

# AKT Polyclonal antibody

Catalog Number: 10176-2-AP

Featured Product

1607 Publications



## Basic Information

### Catalog Number:

10176-2-AP

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0213

### GenBank Accession Number:

BC000479

### 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: 1:2000-1:12000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF-P: 1:200-1:800

IF-Fro: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF-P, IF-Fro, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, ELISA

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, monkey, chicken, zebrafish, sheep, goat, fish, zebra finches

**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**: A549 cells, HeLa cells, HepG2 cells, MCF-7 cells, NIH/3T3 cells, C6 cells, C2C12 cells, mouse brain tissue, rat brain tissue, Jurkat cells, RAW 264, HSC-T6 cells

**IP**: HeLa cells,

**IHC**: human ovary tumor tissue, human breast cancer tissue

**IF-P**: mouse brain tissue,

**IF-Fro**: mouse brain tissue,

## 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
Yangmeng Zhao	36178125	Redox Rep	WB
Xiao-Feng Zhu	36180975	Phytother Res	WB
Tong Li	33152931	Biomed Pharmacother	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

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:

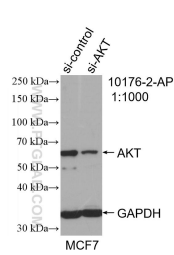
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

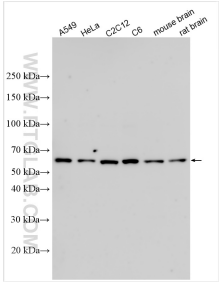
W: [ptgcn.com](http://ptgcn.com)

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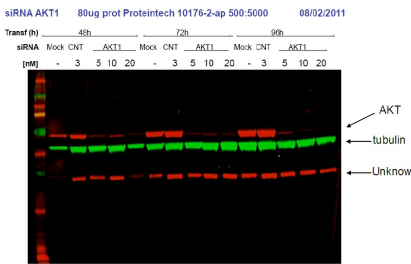
Selected Validation Data



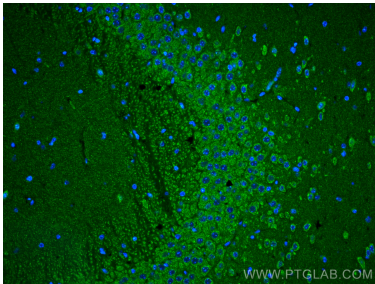
WB result of AKT antibody (10176-2-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AKT transfected MCF-7 cells.



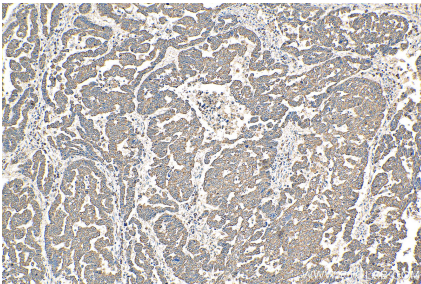
Various lysates were subjected to SDS PAGE followed by western blot with 10176-2-AP (AKT antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



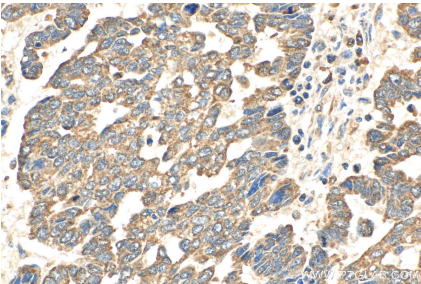
siRNA AKT1 result from Dr. Eva Martinez-Balibrea. Green:tubulin, Red:10176-2-AP, AKT1.



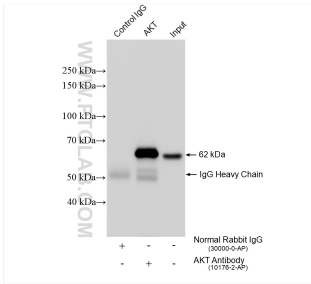
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using AKT antibody (10176-2-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



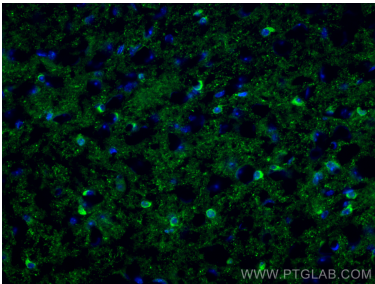
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 10176-2-AP (AKT antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 10176-2-AP (AKT antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-AKT (IP:10176-2-AP, 4ug; Detection:10176-2-AP 1:15000) with HeLa cells lysate 1085 ug.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse brain tissue using AKT antibody (10176-2-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).