For Research Use Only

AKT Polyclonal antibody

Catalog Number:10176-2-AP Featured Product 1064 Publications

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Basic Information

Catalog Number:
10176-2-AP

Size:
150ul , Concentration: 600 μg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG0213

GenBank Accession Number:
BC000479

GeneID (NCBI):
207

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 1:50-1:500

Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
CoIP, ELISA, IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, goat, chicken, rat, zebra finches, mouse, fish, Zebrafish, hamster, pig

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, mouse brain tissue, mouse liver tissue, rat brain tissue

IP : HeLa cells,

IHC : human ovary tumor tissue, human breast cancer tissue

IF : HeLa cells, 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

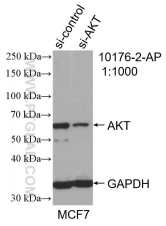
Storage

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

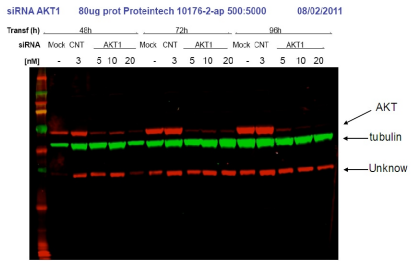
*** 20ul sizes contain 0.1% BSA

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

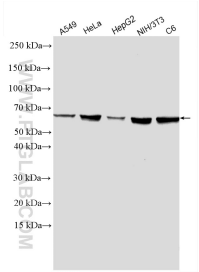
Selected Validation Data



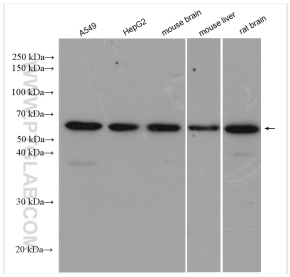
WB result of AKT antibody (10176-2-AP; 1:1000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AKT transfected MCF-7 cells.



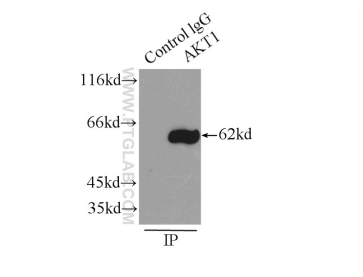
siRNA AKT1 result from Dr. Eva Martinez-Balibrea. Green:tubulin, Red:10176-2-AP, AKT1.



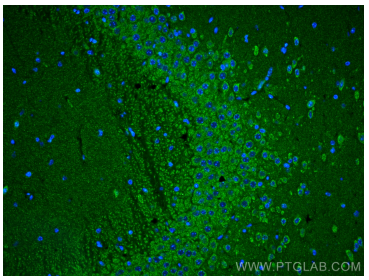
Various lysates were subjected to SDS PAGE followed by western blot with 10176-2-AP (AKT antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



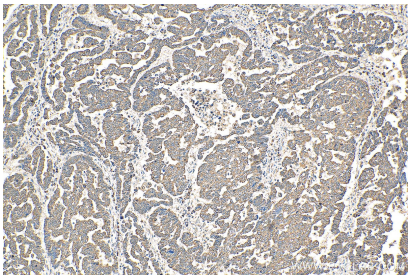
Various lysates were subjected to SDS PAGE followed by western blot with 10176-2-AP (AKT antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



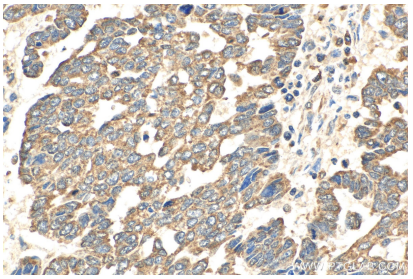
IP Result of anti-AKT1 (IP:10176-2-AP, 3ug; Detection:10176-2-AP 1:500) with HeLa cells lysate 2500ug.



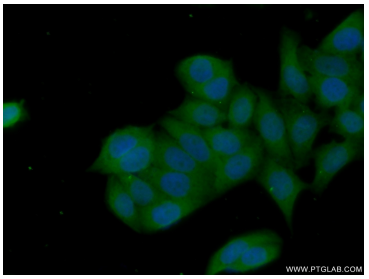
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using AKT antibody (10176-2-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



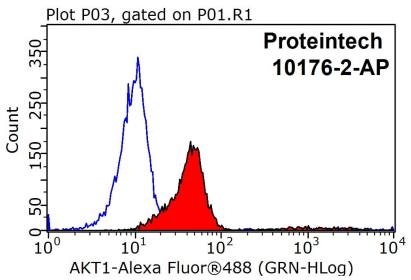
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 10176-2-AP (AKT antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 10176-2-AP (AKT1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10^6 HeLa cells were stained with 0.2ug AKT1 antibody (10176-2-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.