For Research Use Only

AKT1 Recombinant antibody

Catalog Number:80816-1-RR

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
80816-1-RR

Size:
1000 μg/ml

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:
Protein A purification

CloneNo.:
509

Recommended Dilutions:
WB 1:5000-1:50000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:500-1:2000
FC 0.40 ug per 10^6 cells in a 100 µl suspension

Applications

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

Species Specificity:
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 : HEK-293 cells, HeLa cells, A549 cells, Jurkat cells, K-562 cells, NIH/3T3 cells, RAW 264.7 cells, HSC-T6 cells, PC-12 cells

IP : HEK-293 cells,

IHC : human ovary tumor tissue,

FC : Jurkat cells,

Background Information

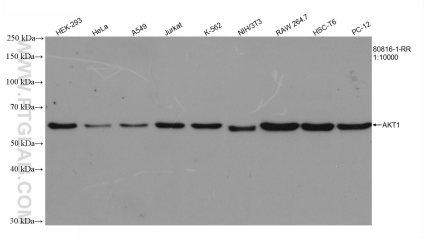
The serine-threonine protein kinase AKT1 is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain 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.

Storage

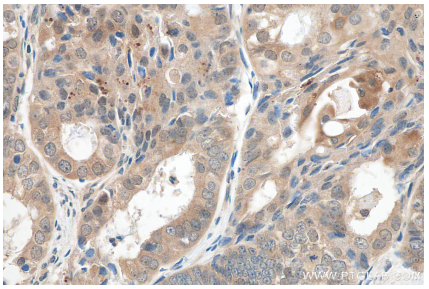
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

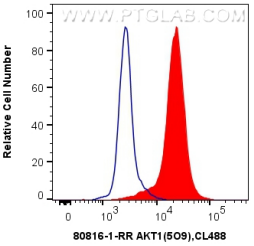
Selected Validation Data



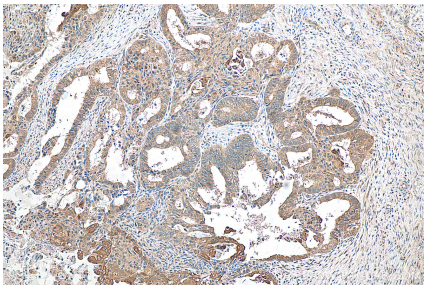
Various lysates were subjected to SDS PAGE followed by western blot with 80816-1-RR (AKT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



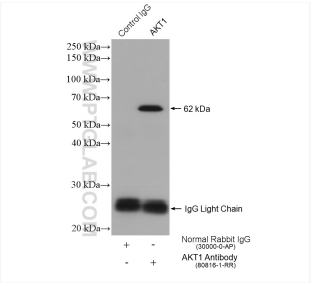
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 80816-1-RR (AKT antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 Jurkat cells were intracellularly stained with 0.4 ug Anti-Human AKT1 (80816-1-RR, Clone:509) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug control antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 80816-1-RR (AKT antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-AKT1 (IP:80816-1-RR, 4ug; Detection:80816-1-RR 1:2000) with HEK-293 cells lysate 1280 ug.