For Research Use Only

AKT1 Recombinant antibody

Catalog Number:80816-1-RR



Basic Information

Applications

Catalog Number: GenBank Accession Number:

80816-1-RR Protein A purification BC000479 GeneID (NCBI): CloneNo.: 100ul, Concentration: 1000 µg/ml by 207 509

Source:

v-akt murine thymoma viral Rabbit oncogene homolog 1

Isotype: Calculated MW: 56 kDa

IgG Immunogen Catalog Number: Observed MW:

56-62 kDa

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

Purification Method:

Recommended Dilutions:

IP 0.5-4.0 ug for IP and 1:1000-1:4000

WB 1:5000-1:50000

IHC 1:500-1:2000

for WB

FC

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 transcriptionindependent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery.

Storage

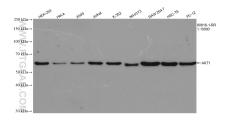
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

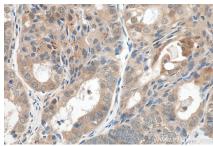
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

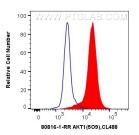
Selected Validation Data



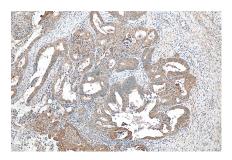
Various lysates were subjected to SDS PAGE followed by western blot with 80816-1-RR (AKT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



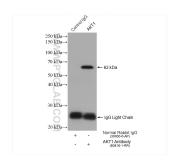
Immunohistochemical analysis of paraffinembedded human ovary tumor tissue slide using 80816-1-RR (AKT antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 Jurkat cells were intracellularly stained with 0.4 ug Anti-Human AKT 1 (80816-1-RR, Clone:509) and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit I gC(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 paraffinembedded 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.