

For Research Use Only

# AKT1-Specific Recombinant antibody, PBS Only

Catalog Number: 80816-1-PBS

Featured Product



## Basic Information

**Catalog Number:**

80816-1-PBS

**Size:**

100ug, Concentration: 1 mg/ml by  
Nanodrop;

**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

## Applications

**Tested Applications:**

WB, IHC, FC (Intra), IP, Indirect ELISA

**Species Specificity:**

human, mouse, rat

## 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. 80816-1-RR recognizes AKT1 specifically.

## Storage

**Storage:**

Store at -80°C.

**Storage Buffer:**

PBS Only

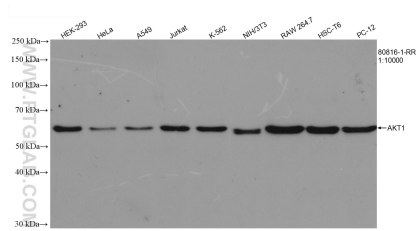
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free  
in USA), or 1(312) 455-8498 (outside USA)

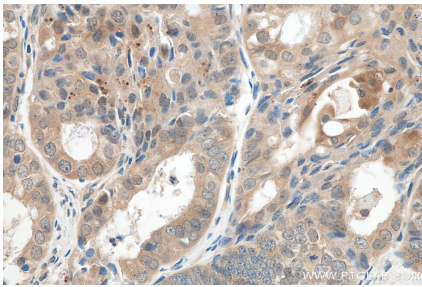
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

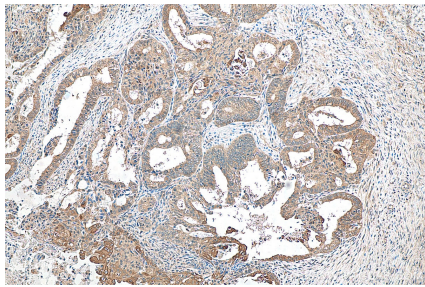
Selected Validation Data



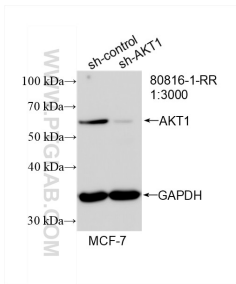
Various lysates were subjected to SDS PAGE followed by western blot with 80816-1-RR (AKT1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80816-1-PBS in a different storage buffer formulation.



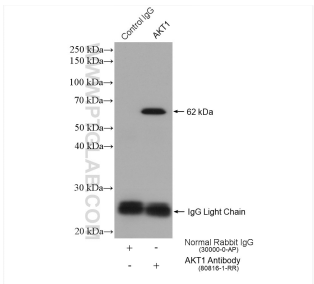
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 80816-1-RR (AKT antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80816-1-PBS in a different storage buffer formulation.



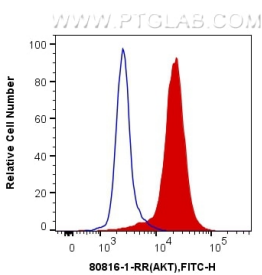
Immunohistochemical analysis of paraffin-embedded human ovary tumor tissue slide using 80816-1-RR (AKT antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80816-1-PBS in a different storage buffer formulation.



WB result of AKT1 antibody (80816-1-RR; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-AKT1 transfected MCF-7 cells. This data was developed using the same antibody clone with 80816-1-PBS in a different storage buffer formulation.



IP result of anti-AKT1 (IP:80816-1-RR, 4ug; Detection:80816-1-RR 1:2000) with HEK-293 cells lysate 1280 ug. This data was developed using the same antibody clone with 80816-1-PBS in a different storage buffer formulation.



1X10<sup>6</sup> 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). This data was developed using the same antibody clone with 80816-1-PBS in a different storage buffer formulation.