For Research Use Only

## Phospho-AKT (Ser473) Monoclonal antibody



Catalog Number: 66444-1-Ig

**Featured Product** 

1199 Publications

NM\_005163

**UNIPROT ID:** 

Full Name:

P31749

GeneID (NCBI):

GenBank Accession Number:

v-akt murine thymoma viral

**Basic Information** 

Catalog Number: 66444-1-lg Concentration: 1500 ug/ml Source:

Source:
Mouse
Isotype:
IgG1

oncogene homolog 1

Observed MW:

60-62 kDa

Purification Method: Protein A purification

CloneNo.: 1C10B8

Recommended Dilutions: WB 1:2000-1:10000 IHC 1:100-1:400

**Applications** 

Tested Applications: WB, IHC, FC (Intra), ELISA

Cited Applications: WB, IHC, IF, IP Species Specificity: human, mouse, rat Cited Species:

human, mouse, rat, pig, rabbit, monkey, chicken, zebrafish, sheep, duck

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: Calyculin A treated PC-3 cells, Calyculin A treated NIH/3T3 cells, Calyculin A treated HEK-293T cells, HSC-T6 cells, TPA treated Jurkat cells, Calyculin A treated HSC-T6 cells

IHC : human breast cancer tissue, Calyculin A treated Jurkat cells, human colon cancer tissue

## **Background Information**

The serine-threonine protein kinase AKT1 is catalytically inactive in serum-starved primary and immortalized fibroblasts. 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. This antibody detects all the members of AKT with phospho-modification at Ser473.

## **Notable Publications**

Author	Pubmed ID	Journal	Application
Wenzhong Peng	36274350	Tissue Cell	WB
Tong Li	33152931	Biomed Pharmacother	WB
Di Cui	36175877	BMC Cancer	WB

Storage

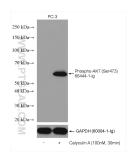
Storage:

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

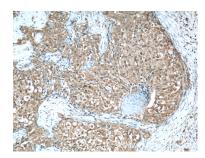
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  $\,$ 

Aliquoting is unnecessary for -20°C storage

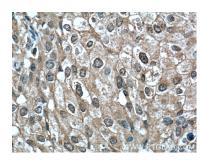
## Selected Validation Data



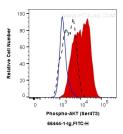
Non-treated PC-3 and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 66444-1-Ig (Phospho-AKT (Ser473) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



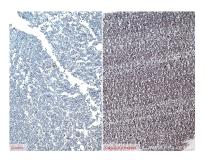
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66444-1-1g (AKT-phospho-5473 antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



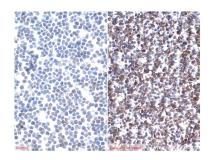
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66444-1-1g (AKT-phospho-5473 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 PC-3 cells untreated (dashed line) or treated with Calyculin A (red) were intracellularly stained with 0.5 ug Anti-Human Phospho-AKT (Ser473) (66444-1-1g, Clone:1C10B8) and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000, or 0.5 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.



Immunohistochemical analysis of paraffinembedded untreated (left) or Calyculin A treated (right) Jurkat cells slide using 66444-1-lg (Phospho-AKT (Ser473) antibody) at dilution of 1:8000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded untreated (left) or Calyculin A treated (right) Jurkat cells slide using 66444-1-1g (Phospho-AKT (Ser473) antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).