For Research Use Only

## Phospho-AKT (Ser473) Monoclonal antibody



Catalog Number: 66444-1-Ig

**Featured Product** 

1370 Publications

**Basic Information** 

Catalog Number: 66444-1-1g Source: Mouse

Isotype: IgG1 GenBank Accession Number:

NM\_005163 Genel D (NCBI): 207

UNIPROT ID: P31749 Full Name:

v-akt murine thymoma viral oncogene homolog 1

Observed MW: 60-62 kDa

Purification Method:

Protein G purification

CloneNo.: 1C10B8

Recommended Dilutions: WB: 1:2000-1:10000 IHC: 1:100-1:400 IF/ICC: 1:200-1:800

FC (Intra): 0.50 ug per 10^6 cells in a

100 µl suspension

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications: WB, IHC, IF 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 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

IF/ICC: Calyculin A treated HeLa cells, FC (Intra): Calyculin A treated PC-3 cells,

## **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

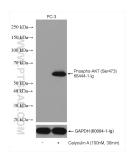
Storage:

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

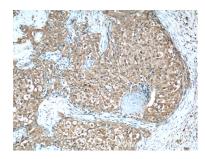
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  $\,$ 

Aliquoting is unnecessary for -20°C storage

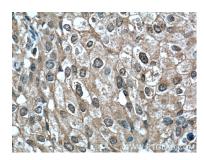
## Selected Validation Data



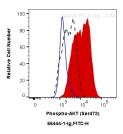
Non-treated PC-3 and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 66444-1-Ig (Phospho-AKT (Ser473) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



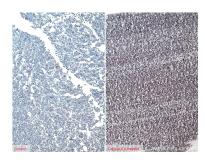
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66444-1-1g (AKT-phospho-5473 antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



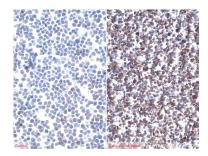
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 66444-1-Ig (AKT-phospho-S473 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



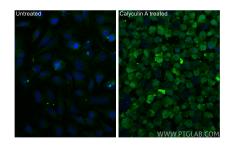
1X10^6 PC-3 cells untreated (dashed line) or treated with Calyculin A (red) were intracellularly stained with 0.5 ug Anti-Human Phospho-AKT (Ser473) (66444-1-lg, Clone:1C1088) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000, or 0.5 ug Control Antibody (blue). Cells 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-lg (Phospho-AKT (Ser473) antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed Calyculin A treated Hela cells using Phospho-AKT (Ser473) antibody (66444-1-Ig, Clone: 1C10B8) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).