

For Research Use Only

Phospho-AKT (Ser473) Monoclonal antibody

Catalog Number: 66444-1-Ig

Featured Product

1385 Publications



Basic Information

Catalog Number:

66444-1-Ig

Size:

100ul, Concentration: 1500 ug/ml by 207

Nanodrop;

Source:

Mouse

Isotype:

IgG1

GenBank Accession Number:

NM_005163

GeneID (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 10⁶ 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

*** 20ul sizes contain 0.1% BSA

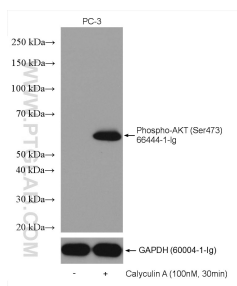
For technical support and original validation data for this product please contact:

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

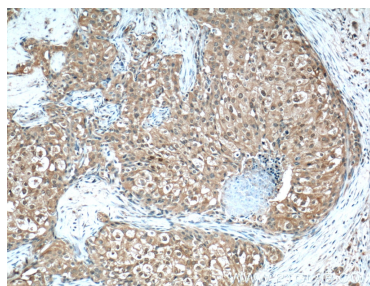
E: proteintech@ptglab.com
W: ptglab.com

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

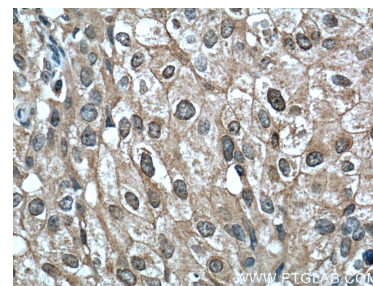
Selected Validation Data



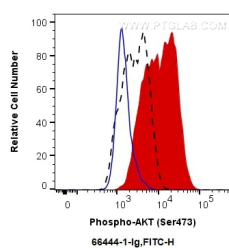
Non-treated PC-3 and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 66444-1-Ig (Phospho-AKT (Ser473) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



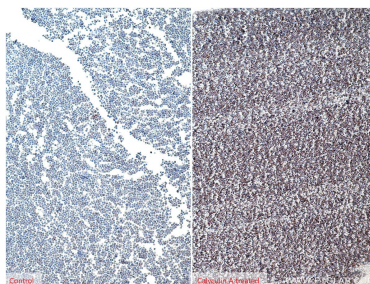
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66444-1-Ig (AKT-phospho-S473 antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



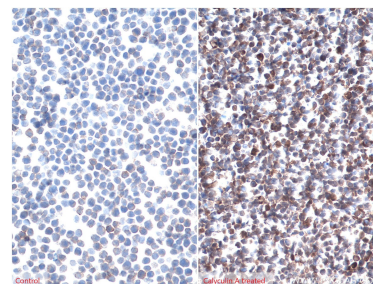
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66444-1-Ig (AKT-phospho-S473 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



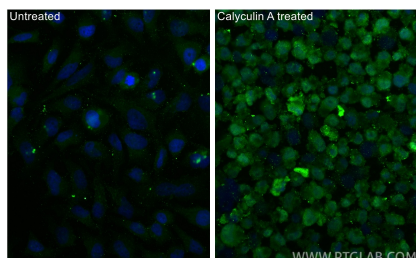
1X10⁶ PC-3 cells untreated (dashed line) or treated with Calyculin A (red) were intracellularly stained with 0.5 ug Anti-Human Phospho-AKT (Ser473) (66444-1-Ig, Clone: 1C10B8) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000, or 0.5 ug Control Antibody (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.



Immunohistochemical analysis of paraffin-embedded untreated (left) or Calyculin A treated (right) Jurkat cells slide using 66444-1-Ig (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 paraffin-embedded untreated (left) or Calyculin A treated (right) Jurkat cells slide using 66444-1-Ig (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).