For Research Use Only

Phospho-AKT (Ser473) Monoclonal antibody

Catalog Number:66444-1-Ig Featured Product 1239 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
66444-1-Ig

Concentration:
1500 ug/ml

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 A purification

CloneNo.:
1C10B8

Recommended Dilutions:
WB: 1:2000-1:10000
IHC: 1:100-1:400
FC (Intra): 0.50 ug per 10^6 cells in a 100 µl suspension

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

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

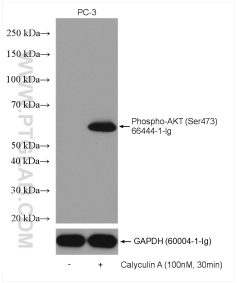
Author	Pubmed ID	Journal	Application
Wenzhong Peng	36274350	Tissue Cell	WB
Tong Li	33152931	Biomed Pharmacother	WB
Di Cui	36175877	BMC Cancer	WB

Storage

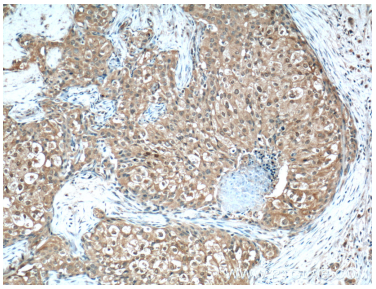
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

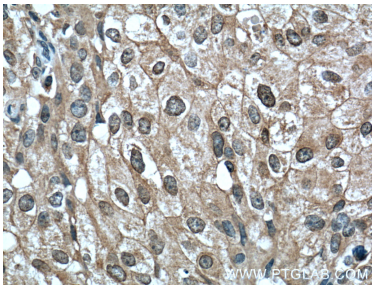
Selected Validation Data



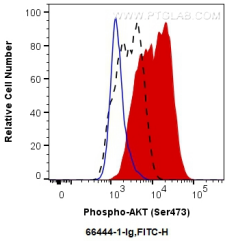
Non-treated PC-3 and Calyculin A treated PC-3 cells were subjected to SDS PAGE followed by western blot with 66444-1-Ig (Phospho-AKT (Ser473) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody as loading control.



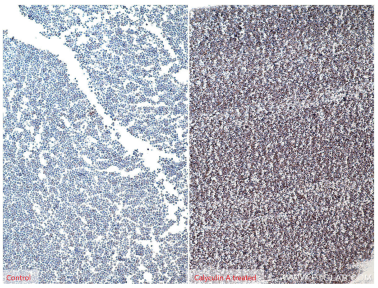
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66444-1-Ig (AKT-phospho-S473 antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



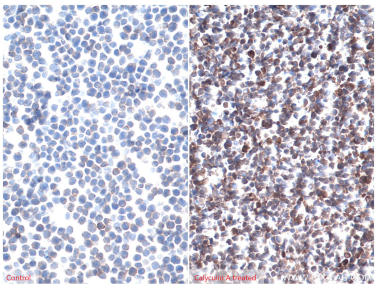
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66444-1-Ig (AKT-phospho-S473 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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-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).