For Research Use Only

CoraLite®594-conjugated Phospho-AKT1 (Ser473) Recombinant antibody

Catalog Number:CL594-80462

proteintech®
Antibodies | ELISA kits | Proteins
Uni-rAb
www.ptglab.com

Basic Information

Catalog Number:
CL594-80462

Size:
100ul , Concentration: 1000 ug/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_005163

GeneID (NCBI):
207

UNIPROT ID:
P31749

Full Name:
v-akt murine thymoma viral oncogene homolog 1

Observed MW:
56-62 kDa

Purification Method:
Protein A purification

CloneNo.:
2M10

Recommended Dilutions:
IF/ICC 1:50-1:500

Excitation/Emission maxima wavelengths:
588 nm / 604 nm

Applications

Tested Applications:
IF/ICC, FC (Intra)

Species Specificity:
human, mouse

Positive Controls:

IF/ICC : Calyculin A treated HeLa cells,

Background Information

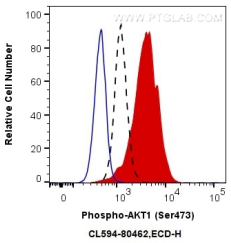
AKT is a serine/threonine kinase and it participates in the key role of the PI3K signaling pathway. Phosphatidylinositol-3 kinase (PI3K) is the key regulator of AKT activation. The recruitment of inactive AKT protein to PIP3-rich areas of the plasma membrane results in a conformational change that exposes the activation loop of AKT. AKT's activating kinase, phosphoinositide-dependent protein kinase (PDK1) , is also recruited to PIP3 microdomains. PDK1 phosphorylates AKT on threonine 308 (Thr308) of the exposed activation loop, activating AKT and leading to a second phosphorylation of AKT at serine 473 (Ser473) by a kinase presumed to be mTORC2 that further potentiates kinase activity. Active AKT will phosphorylate various downstream protein targets that control cell growth and translational control and act to suppress apoptosis. (PMID: 31594388, PMID: 30808672). 80462-1-RR specifically recognizes AKT1 phosphorylated at Ser473.

Storage

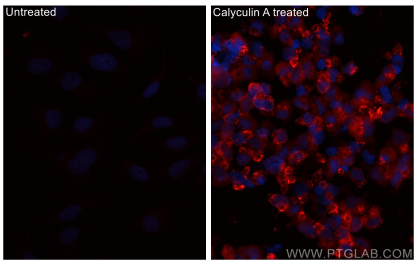
Storage:
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.
Storage Buffer:
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.
Aliquoting is unnecessary for -20°C storage

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

Selected Validation Data



1X10^6 NIH/3T3 cells untreated (dashed line) or treated with Calyculin A (red) were intracellularly stained with 0.25 ug CoraLite®594 Anti-Human Phospho-AKT1 (Ser473) (CL594-80462, Clone:2M10) , or 0.25 ug Control Antibody (Blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH.



Immunofluorescent analysis of (4% PFA) fixed Calyculin A treated HeLa cells using CoraLite®594 Phospho-AKT1 (Ser473) antibody (CL594-80462, Clone: 2M10) at dilution of 1:200.