For Research Use Only

Phospho-AKT (Thr308) Recombinant antibody, PBS Only

Catalog Number:81232-10-PBS

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Antibodies | ELISA kits | Proteins
Uni-rAb
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Basic Information

Catalog Number:
81232-10-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
BC000479

GeneID (NCBI):
207

UNIPROT ID:
P31749

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

Calculated MW:
56 kDa

Observed MW:
60 kDa

Purification Method:
Protein A purification

CloneNo.:
242063B2

Applications

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

Species Specificity:
human, mouse, rat

Background Information

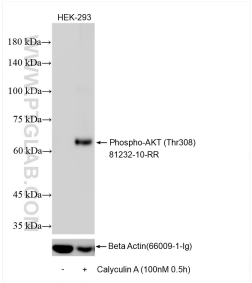
AKT is a serine/threonine kinase and it participates in the key role of the PI3K signaling pathway. Phosphatidylinositol-3 kinase (PI3K) is the key regulator of AKT activation. The recruitment of inactive AKT protein to PIP3-rich areas of the plasma membrane results in a conformational change that exposes 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)

Storage

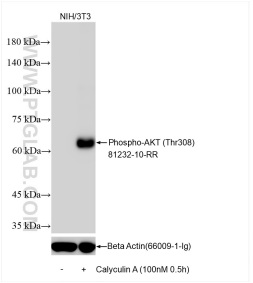
Storage:
Store at -80°C.
Storage Buffer:
PBS Only

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

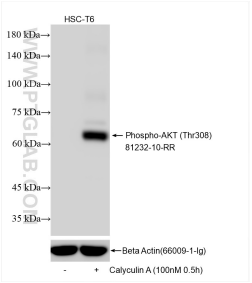
Selected Validation Data



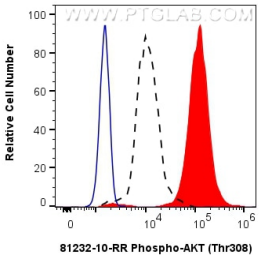
Non-treated HEK-293 cells and Calyculin A treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 81232-10-RR (Phospho-AKT (Thr308) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin (66009-1-Ig) antibody as a loading control. This data was developed using the same antibody clone with 81232-10-PBS in a different storage buffer formulation.



Non-treated NIH/3T3 cells and Calyculin A treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 81232-10-RR (Phospho-AKT (Thr308) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin (66009-1-Ig) antibody as a loading control. This data was developed using the same antibody clone with 81232-10-PBS in a different storage buffer formulation.



Non-treated HSC-T6 cells and Calyculin A treated HSC-T6 cells were subjected to SDS PAGE followed by western blot with 81232-10-RR (Phospho-AKT (Thr308) antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Beta Actin (66009-1-Ig) antibody as a loading control. This data was developed using the same antibody clone with 81232-10-PBS in a different storage buffer formulation.



1X10^6 HeLa cells untreated (dashed lines) or treated with Calyculin A which intracellularly stained with 0.13 ug Phospho-AKT (Thr308) Recombinant antibody (81232-10-RR, Clone:242063B2) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.13 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with 90% MeOH. This data was developed using the same