

For Research Use Only

Phospho-AKT (Thr308) Polyclonal antibody



Catalog Number: 29163-1-AP

11 Publications

Basic Information

Catalog Number:

29163-1-AP

Size:

400 µg/ml

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:

58 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB, IHC

Species Specificity:

Human

Cited Species:

human, rat, mouse

Positive Controls:

WB: Calyculin A treated HEK-293 cells, Calyculin A treated HeLa cells, HEK-293 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)

Notable Publications

Author	Pubmed ID	Journal	Application
Fei Gao	36261682	Biotechnol Lett	WB
Yifan Zhang	35599595	Bioengineered	WB
Ming Xin	35592418	Front Pharmacol	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

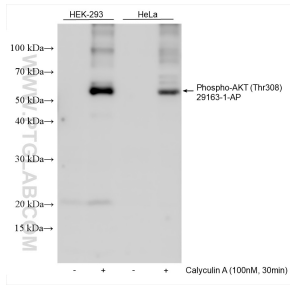
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This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Non-treated and Calyculin A treated cells were subjected to SDS PAGE followed by western blot with 29163-1-AP (Phospho-AKT (Thr308) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.