

For Research Use Only

# Phospho-AKT (Thr308) Polyclonal antibody



Catalog Number: 29163-1-AP

11 Publications

## Basic Information

**Catalog Number:**

29163-1-AP

**Size:**

100ul , Concentration: 400 µg/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:**

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

\*\*\* 20ul sizes contain 0.1% BSA

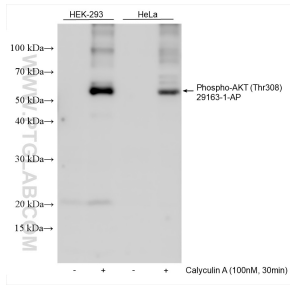
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## Selected Validation Data



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.