

For Research Use Only

Phospho-AKT (Ser473) Recombinant monoclonal antibody, PBS Only

Catalog Number:80462-2-PBS



Basic Information

Catalog Number: 80462-2-PBS	GenBank Accession Number: NM_005163	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 207	CloneNo.: 253264G12
Source: Rabbit	UNIPROT ID: P31749	
Isotype: IgG	Full Name: v-akt murine thymoma viral oncogene homolog 1	
	Observed MW: 58 kDa	

Applications

Tested Applications:
WB, 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, pH7.3

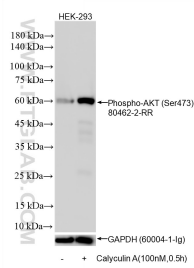
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

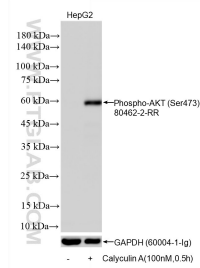
E: proteintech@ptglab.com
W: ptglab.com

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Selected Validation Data



Non-treated and Calyculin A treated HEK-293 cells were subjected to SDS PAGE followed by western blot with 80462-2-RR (Phospho-AKT (Ser473) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody (60004-1-Ig) as loading control. This data was developed using the same antibody clone with 80462-2-PBS in a different storage buffer formulation.



Non-treated and Calyculin A treated HepG2 cells were subjected to SDS PAGE followed by western blot with 80462-2-RR (Phospho-AKT (Ser473) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH antibody (60004-1-Ig) as loading control. This data was developed using the same antibody clone with 80462-2-PBS in a different storage buffer formulation.