

For Research Use Only

Phospho-PKC Delta (Ser645) Recombinant monoclonal antibody

Catalog Number: 87213-1-RR



Basic Information

Catalog Number: 87213-1-RR	GenBank Accession Number: NM_006254	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 5580	CloneNo.: 252421F11
Source: Rabbit	UNIPROT ID: Q05655	Recommended Dilutions: WB: 1:500-1:2000
Isotype: IgG	Full Name: protein kinase C, delta	FC (Intra): 0.13 ug per 10 ⁶ cells in a 100 µl suspension
	Calculated MW: 78 kDa	
	Observed MW: 78 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls:
Species Specificity: human	WB : A549 cells, HeLa cells FC (Intra) : λ phosphatase treated A549 cells,

Background Information

Protein kinase C (PKC) was initially identified and characterized as a protein hydrolysis-activated kinase called protein kinase M. It has been established that PKC is a family of at least 12 serine/threonine kinases that is divided into three subfamilies: The classical PKCs (α, β1, β2, and γ), which are activated by diacylglycerol (DAG) and calcium; the novel PKCs (δ, ε, η, and θ) which are activated by DAG; and the atypical PKCs (ζ and λ/ι), which respond to neither DAG nor calcium. Phospho-PKC Delta (Ser645) refers to the phosphorylated form of Protein Kinase C Delta (PKCδ) at serine residue 645. This phosphorylation site is located in the C-terminal tail of PKCδ, specifically in the turn motif region, and serves as a critical "priming" phosphorylation that regulates enzyme stability and catalytic activity. (PMID: 28784722) This antibody is equivalent to Ser643 in mice.

Storage

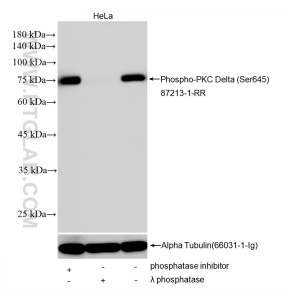
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

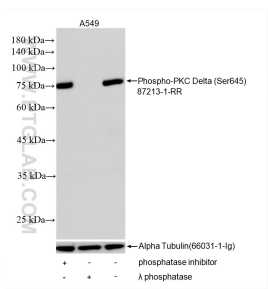
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

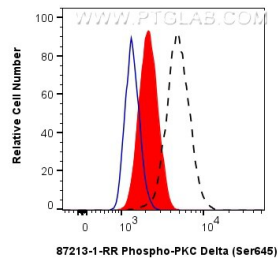
Selected Validation Data



Non-treated HeLa cells, phosphatase inhibitor treated HeLa cells and λ phosphatase treated HeLa cells were subjected to SDS PAGE followed by western blot with 87213-1-RR (Phospho-PKC Delta (Ser645) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Alpha Tubulin (66031-1-Ig) antibody as a loading control.



Non-treated A549 cells, phosphatase inhibitor treated A549 cells and λ phosphatase treated A549 cells were subjected to SDS PAGE followed by western blot with 87213-1-RR (Phospho-PKC Delta (Ser645) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with Alpha Tubulin (66031-1-Ig) antibody as a loading control.



1X10⁶ A549 cells untreated (dashed lines) or treated with λ phosphatase which intracellularly stained with 0.13 ug Phospho-PKC Delta (Ser645) Recombinant monoclonal antibody (87213-1-RR, Clone:252421F 11) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.13 ug Isotype Control (blue). Cells were fixed and permeabilized with Flow Cytometry Phosphorylated Protein Fixation/Permeabilization Kit (PF00026).