

For Research Use Only

# Phospho-PDPK1 (Ser241) Recombinant monoclonal antibody

Catalog Number: 85223-3-RR



## Basic Information

Catalog Number:

85223-3-RR

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

BC012103

GeneID (NCBI):

5170

UNIPROT ID:

O15530

Full Name:

3-phosphoinositide dependent protein kinase-1

Calculated MW:

556 aa, 63 kDa

Observed MW:

58-68 kDa

Purification Method:

Protein A purification

CloneNo.:

250623A11

Recommended Dilutions:

WB: 1:1000-1:6000

FC (Intra): 0.13 ug per 10<sup>6</sup> cells in a 100 µl suspension

## Applications

Tested Applications:

WB, FC (Intra), ELISA

Species Specificity:

human, mouse

Positive Controls:

WB: NIH/3T3 cells, λ phosphatase treated NIH/3T3 cells

FC (Intra): λ phosphatase treated NIH/3T3 cells,

## Background Information

3-Phosphoinositide dependent protein kinase-1 (PDK1 or PDPK1) is a serine-threonine kinase belonging to AGC kinase family. PDK1 plays a critical role in establishing ACD (Asymmetric cell division) in the epithelium (PMID: 27184845). The kinase activity of PDK1 depends on phosphatidyl inositol 3-kinase (PI3K), a key intermediate in signaling pathways including those from growth factor receptors and adhesion molecules. Substrates of PDK1, including AKT and the protein kinase C (PKC) isozymes, regulate a number of essential cell functions (PMID: 20027184). PDPK1 has 5 isoforms produced by alternative splicing of 48-63 kDa and is detected as 60-63 kDa.

## 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

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

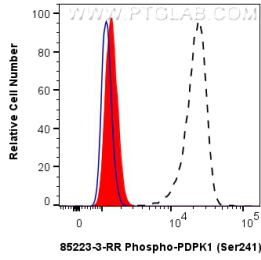
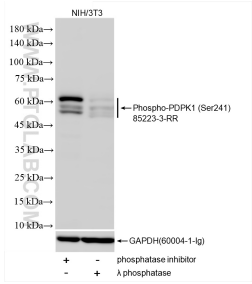
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Selected Validation Data



Non-treated NIH/3T3 cells, phosphatase inhibitor treated NIH/3T3 cells and λ phosphatase treated NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 85223-3-RR (Phospho-PDPK1 (Ser241) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with GAPDH (60004-1-Ig) antibody as a loading control.

1X10<sup>6</sup> NIH/3T3 cells untreated (dashed lines) or treated with λ phosphatase which intracellularly stained with 0.13 ug Phospho-PDPK1 (Ser241) Recombinant monoclonal antibody (85223-3-RR, Clone:250623A11) 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 and permeabilized with Flow Cytometry Phosphorylated Protein