

For Research Use Only

# PDPK1 Polyclonal antibody

Catalog Number: 17086-1-AP

Featured Product

13 Publications



## Basic Information

### Catalog Number:

17086-1-AP

### Size:

150ul, Concentration: 400 ug/ml by Nanodrop and 233 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG9213

### 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:

60-63 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human

### Cited Species:

human, mouse

### Positive Controls:

WB : MCF-7 cells, LNCaP cells

IHC : human breast cancer tissue,

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## 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 phosphatidylinositol 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) isoforms, 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.

## Notable Publications

Author	Pubmed ID	Journal	Application
Zhang-Hua Yang	32979304	Mol Cell	WB
Wenjuan Wang	35715716	Biol Trace Elem Res	WB
Yunzhi Liu	35671705	J Innate Immun	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

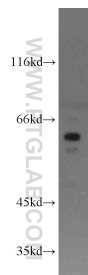
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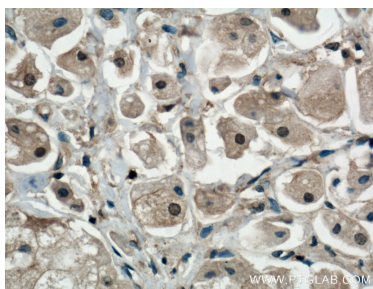
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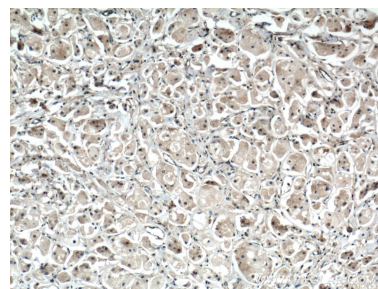
## Selected Validation Data



MCF-7 cells were subjected to SDS PAGE followed by western blot with 17086-1-AP (PDPK1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 17086-1-AP (PDPK1 antibody) at dilution of 1:100 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 17086-1-AP (PDPK1 antibody) at dilution of 1:100 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).