

For Research Use Only

# PDK1 Polyclonal antibody

Catalog Number: 18262-1-AP

Featured Product

40 Publications



## Basic Information

Catalog Number:

18262-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG13121

GenBank Accession Number:

BC039158

GeneID (NCBI):

5163

UNIPROT ID:

Q15118

Full Name:

pyruvate dehydrogenase kinase, isozyme 1

Calculated MW:

436 aa, 49 kDa

Observed MW:

46-55 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:6000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:500-1:2000

## Applications

Tested Applications:

WB, IHC, IP, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat

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

Positive Controls:

WB: mouse heart tissue, HEK-293 cells, NIH/3T3 cells, mouse liver tissue, rat liver tissue

IP: SiHa cells,

IHC: human liver cancer tissue, human heart tissue, human kidney tissue, human breast cancer tissue, mouse kidney tissue, rat kidney tissue

## Background Information

PDK1(pyruvate dehydrogenase kinase isoform 1) is also named as PDHK1 and belongs to the PDK/BCKDK protein kinase family. It inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism (PMID:17683942). Starvation increases islet PDK activity (PMID:11723055). PDK1 has 2 isoforms with the MW of 49 and 52 kD, and a 28aa-transit-peptide in the N-terminal can be removed in the mature form. This antibody is specific to PDK1.

## Notable Publications

| Author      | Pubmed ID | Journal        | Application |
|-------------|-----------|----------------|-------------|
| Fan Wang    | 28990055  | Mol Med Rep    | WB          |
| Tao Zeng    | 28987868  | Redox Biol     | WB          |
| Xuehui Wang | 36115854  | Cell Death Dis | WB          |

## 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

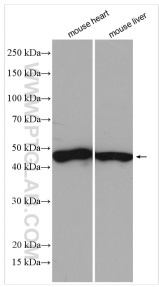
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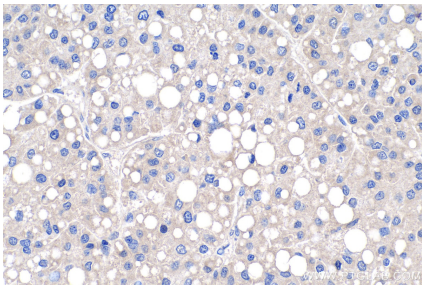
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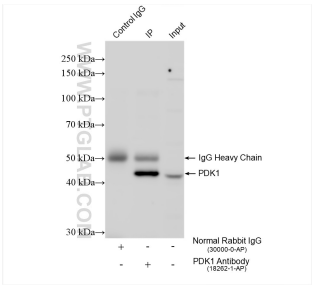
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 18262-1-AP (PDK1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 18262-1-AP (PDK1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-PDK1 (IP:18262-1-AP, 4ug; Detection:18262-1-AP 1:3000) with SiHa cells lysate 1520 ug.