### For Research Use Only

# PDK1 Polyclonal antibody

Catalog Number: 18262-1-AP

**Featured Product** 

35 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: 18262-1-AP BC039158 GeneID (NCBI): Concentration:  $600 \mu g/ml$ 5163 **UNIPROT ID:** Source: Rabbit Q15118 Full Name: Isotype:

pyruvate dehydrogenase kinase, isozvme 1

Immunogen Catalog Number: AG13121 Calculated MW: 436 aa. 49 kDa

Observed MW: 46-55 kDa

**Applications** 

**Tested Applications:** WB, IHC, IF/ICC, 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

**Purification Method:** 

WB 1:1000-1:6000 IHC 1:500-1:2000

IF/ICC 1:200-1:800

Antigen affinity purification

Recommended Dilutions:

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

IF/ICC: HEK-293 cells.

## **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 Nterminal 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

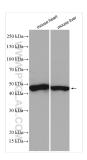
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

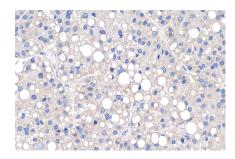
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

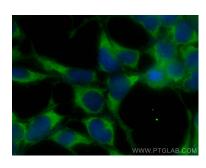
## **Selected Validation Data**



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 paraffinembedded 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).



Immunofluorescent analysis of (-20°C Ethanol) fixed HEK-293 cells using PDK1 antibody (18262-1-AP) at dilution of 1:400 and CoraLite $^{\circ}$ 488-Conjugated Goat Anti-Rabbit IgG(H+L).