

For Research Use Only

PDH E1 Alpha Polyclonal antibody

Catalog Number: 18068-1-AP

Featured Product

74 Publications



Basic Information

Catalog Number:

18068-1-AP

Concentration:

500 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG12701

GenBank Accession Number:

BC002406

GeneID (NCBI):

5160

UNIPROT ID:

P08559

Full Name:

pyruvate dehydrogenase (lipoamide)
alpha 1

Calculated MW:

43 kDa

Observed MW:

39-48 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:5000-1:50000

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

IHC 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, chicken

**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 : HeLa cells, HEK293 cells, mouse brain tissue, rat
brain tissue, rat kidney tissue

IP : mouse kidney tissue,

IHC : human liver cancer tissue,

IF/ICC : HepG2 cells,

Background Information

PDHA1(Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial) is also named as PHE1A. It is one of the 3 enzymes of the pyruvate dehydrogenase complex which is a nuclear-encoded mitochondrial matrix multienzyme complex that provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle by catalyzing the irreversible conversion of pyruvate into acetyl-CoA (PMID:7853374). It has 4 isoforms produced by alternative splicing with the molecular mass of 39-48 kDa. Defects in PDHA1 are a cause of pyruvate dehydrogenase E1-alpha deficiency (PDHAD) and X-linked Leigh syndrome (X-LS).

Notable Publications

Author	Pubmed ID	Journal	Application
Fabao Liu	26309161	Oncotarget	WB, IHC
Xiao Meng Zhang	33062708	J Diabetes Res	WB
Teresa W-M Fan	36150727	J Immunol	

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:

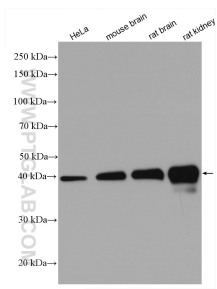
T: 4006900926

E: Proteintech-CN@ptglab.com

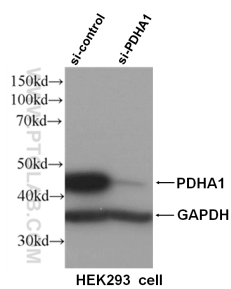
W: ptgcn.com

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

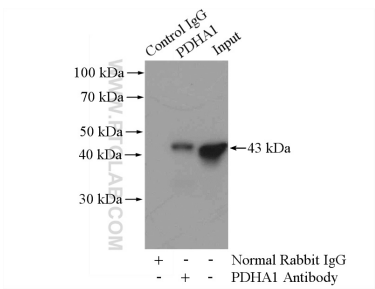
Selected Validation Data



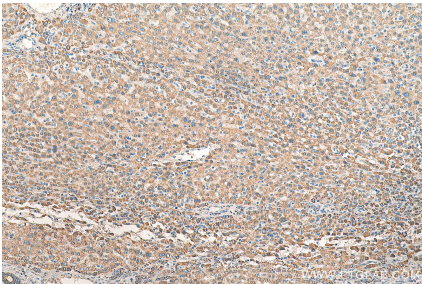
Various lysates were subjected to SDS PAGE followed by western blot with 18068-1-AP (PDH E1 Alpha antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



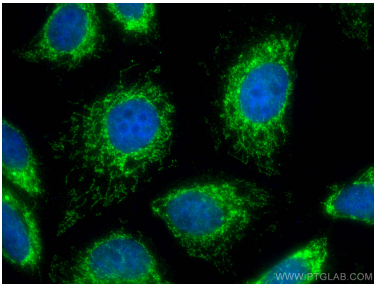
WB result of PDHA1 antibody (18068-1-AP, 1:1000) with si-control and si-PDHA1 transfected HEK293 cells.



IP result of anti-PDH E1 Alpha (IP:18068-1-AP, 4ug; Detection:18068-1-AP 1:1000) with mouse kidney tissue lysate 4400ug.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 18068-1-AP (PDH E1 Alpha antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using PDH E1 Alpha antibody (18068-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).