

For Research Use Only

PDH E1 Alpha Polyclonal antibody

Catalog Number: 18068-1-AP

Featured Product

57 Publications



Basic Information

Catalog Number: 18068-1-AP	GenBank Accession Number: BC002406	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 500 µg/ml by Nanodrop;	GeneID (NCBI): 5160	Recommended Dilutions: WB 1:5000-1:50000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
Source: Rabbit	Full Name: pyruvate dehydrogenase (lipoamide) alpha 1	IHC 1:50-1:500 IF 1:50-1:500
Isotype: IgG	Calculated MW: 43 kDa	
Immunogen Catalog Number: AG12701	Observed MW: 39-48 kDa	

Applications

Tested Applications:
IF, IHC, IP, WB, ELISA

Cited Applications:
IF, IHC, IP, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, chicken, rat, mouse

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: 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 pH 7.3.

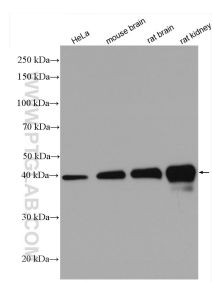
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

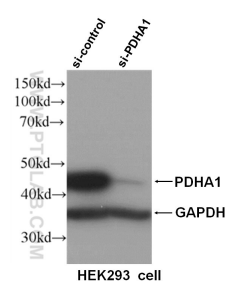
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

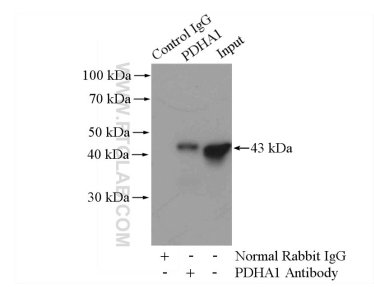
Selected Validation Data



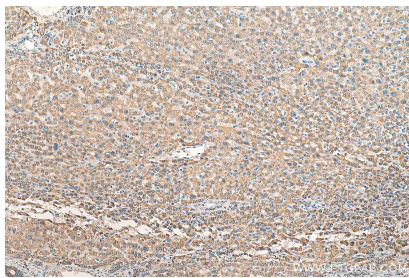
Various lysates were subjected to SDS PAGE followed by western blot with 18068-1-AP (PDH E1 Alpha antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



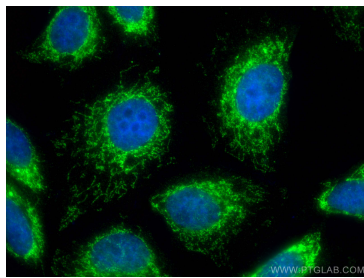
WB result of PDHA1 antibody (18068-1-AP, 1:1000) with si-control and si-PDHA1 transfected HEK293 cells.



IP Result of anti-PDHA1 (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 AffiniPure Goat Anti-Rabbit IgG(H+L).