

For Research Use Only

PDH E1 Alpha Monoclonal antibody



Catalog Number: 66119-1-Ig

Featured Product

8 Publications

Basic Information

Catalog Number: 66119-1-Ig	GenBank Accession Number: BC002406	Purification Method: Protein A purification
Size: 150ul, Concentration: 2400 µg/ml by Nanodrop and 1867 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 5160	CloneNo.: 2B3C10
Source: Mouse	Full Name: pyruvate dehydrogenase (lipoamide) alpha 1	Recommended Dilutions: WB 1:5000-1:50000 IP 0.5-4.0 ug for IP and 1:5000-1:50000 for WB
Isotype: IgG2a	Calculated MW: 43 kDa	IHC 1:400-1:1600 IF 1:20-1:200
Immunogen Catalog Number: AG12556	Observed MW: 43 kDa	

Applications

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

Cited Applications:
IF, IP, WB

Species Specificity:
human

Cited Species:
human

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 : HEK-293 cells, HEK293 cells

IP : HEK-293 cells,

IHC : human liver cancer tissue, human heart tissue, human liver 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.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
Jin-Long Pang	34537213	Toxicol Appl Pharmacol	WB
Xiaoyu Ma	25301052	Nat Commun	WB
Yajuan Zhang	35315437	Nat Metab	WB,IF

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

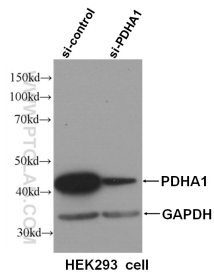
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

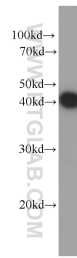
E: proteintech@ptglab.com
W: ptglab.com

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

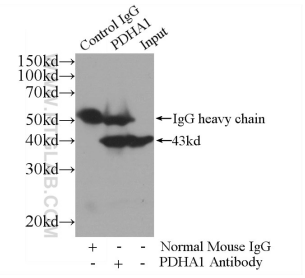
Selected Validation Data



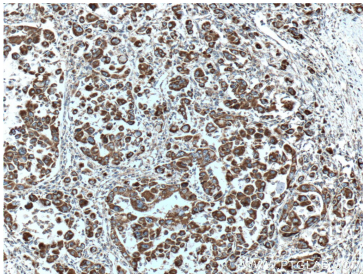
WB result of PDHA1 antibody (66119-1-Ig, 1:30000) with si-control and si-PDHA1 transfected HEK293 cells.



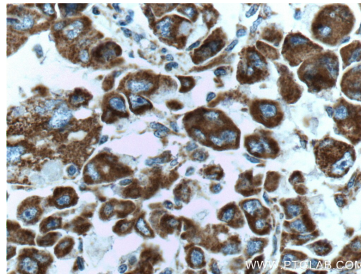
HEK-293 cells were subjected to SDS PAGE followed by western blot with 66119-1-Ig (PDH E1a antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



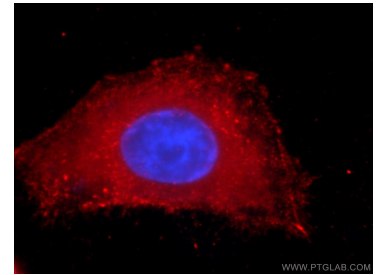
IP Result of anti-PDH E1a (IP:66119-1-Ig, 3ug; Detection:66119-1-Ig 1:10000) with HEK-293 cells lysate 1800ug.



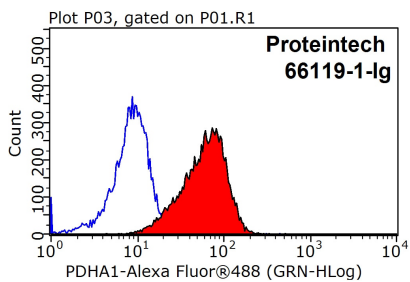
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66119-1-Ig (PDH E1a antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66119-1-Ig (PDH E1a antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of HepG2 cells using 66119-1-Ig (PDH E1a antibody) at dilution of 1:100 and Rhodamine-Goat anti-Mouse IgG.



1×10^6 HepG2 cells were stained with .2ug PDH E1a antibody (66119-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1000.