

For Research Use Only

PDH E1 Alpha Monoclonal antibody

Catalog Number: 66119-1-Ig

Featured Product

12 Publications



Basic Information

Catalog Number: 66119-1-Ig	GenBank Accession Number: BC002406	Purification Method: Protein A purification
Size: 150ul, Concentration: 2400 ug/ml by Nanodrop and 1867 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 5160	CloneNo.: 2B3C10
Source: Mouse	UNIPROT ID: P08559	Recommended Dilutions: WB: 1:5000-1:50000 IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
Isotype: IgG2a	Full Name: pyruvate dehydrogenase (lipoamide) alpha 1	IHC: 1:400-1:1600 IF/ICC: 1:20-1:200
Immunogen Catalog Number: AG12556	Calculated MW: 43 kDa	
	Observed MW: 43 kDa	

Applications

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

Cited Applications:
WB, IF, IP

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: K-562 cells,

IHC: human liver cancer tissue, human heart tissue, human liver 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.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, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

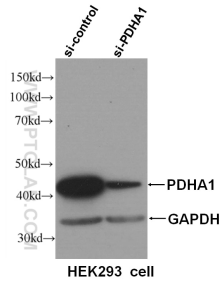
For technical support and original validation data for this product please contact:

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

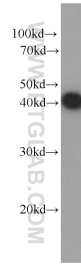
E: proteintech@ptglab.com
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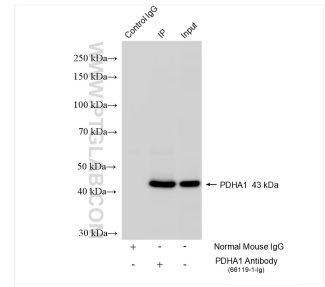
Selected Validation Data



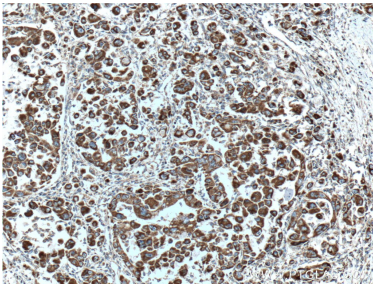
WB result of PDHA1 antibody (66119-1-Ig, 1:30000) with si-control and si-PDHA1 transfected HEK293 cells.



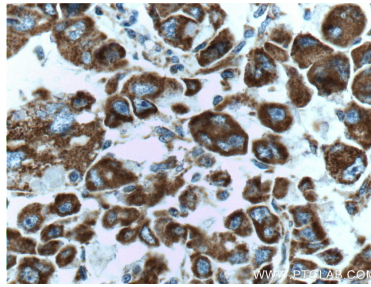
HEK-293 cells were subjected to SDS PAGE followed by western blot with 66119-1-Ig (PDH E1α antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



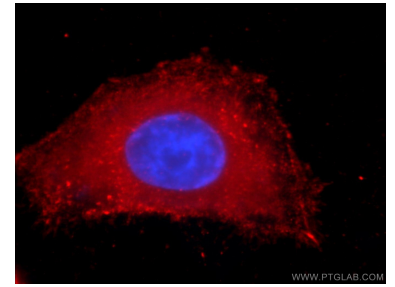
IP result of anti-PDH E1 Alpha (IP:66119-1-Ig, 4ug; Detection:66119-1-Ig 1:10000) with K-562 cells lysate 1820 ug.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66119-1-Ig (PDH E1α 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 E1α 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 E1α antibody) at dilution of 1:100 and Rhodamine-Goat anti-Mouse IgG.