For Research Use Only

PDH E1 Alpha Monoclonal antibody

Catalog Number: 66119-1-lg Featured Product 10 Publications

alpha 1

Calculated MW: 43 kDa Observed MW: 43 kDa



Basic Information

Catalog Number: 66119-1-lg Concentration: 2400 ug/ml

Source: Mouse Isotype: IgG2a

Immunogen Catalog Number:

AG12556

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications: WB, IF, IP

Species Specificity: human

Cited Species:

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

GenBank Accession Number: **Purification Method:** BC002406

Protein A purification GeneID (NCBI): CloneNo.: 5160 2B3C10

UNIPROT ID: Recommended Dilutions: P08559 WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total Full Name:

pyruvate dehydrogenase (lipoamide) protein lysate IHC 1:400-1:1600 IF/ICC 1:20-1:200

Applications

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

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

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

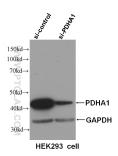
Aliquoting is unnecessary for -20°C storage

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

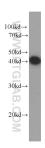
T: 4006900926 E: Proteintech-CN@ptglab.com

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

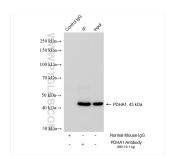
Selected Validation Data



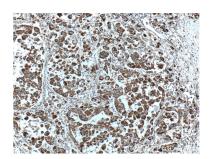
WB result of PDHA1 antibody (66119-1-Ig, 1:30000) with si-control and si-PDHA1 transfected HEK293 cells.



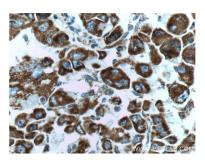
HEK-293 cells were subjected to SDS PAGE followed by western blot with 66119-1-lg (PDH E1 α antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



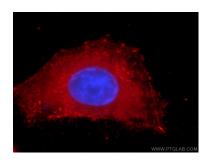
IP result of anti-PDH E1 Alpha (IP:66119-1-Ig, 4ug; Detection:66119-1-Ig 1:10000) with K-562 cells lysate 1820 ug.



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66119-1-Ig (PDH E1 a antibody at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66119-1-Ig (PDH E1 $^{\alpha}$ 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-lg (PDH E1 $^\alpha$ antibody) at dilution of 1:100 and Rhodamine-Goat anti-Mouse IgG.