

Product Name: PDHA1 Mouse Monoclonal Antibody**Catalog #: AMM82964**

For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC,ELISA,FC,IP
Reactivity	Human, Mouse, Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:200-1:1000,ICC 1:50-1:200,ELISA 1:5000-1:20000,FC 1:200-1:400,IP 1:200-1:300
Molecular Weight	43 kDa

Antigen Information

Gene Name	PDHA1
Alternative Names	PDHA; PDHAD; PHE1A; PDHCE1A
Gene ID	5160.0
SwissProt ID	P08559
Immunogen	Purified recombinant fragment of human PDHA1(AA: 241-390) expressed in E. Coli.

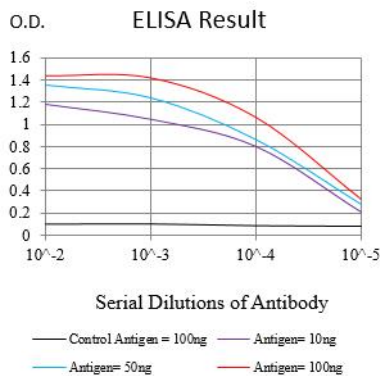
Background

The pyruvate dehydrogenase (PDH) complex is a nuclear-encoded mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO₂, and provides the primary link between glycolysis and the tricarboxylic

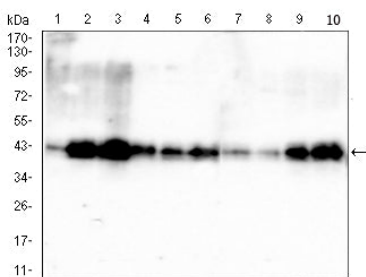
acid (TCA) cycle. The PDH complex is composed of multiple copies of three enzymatic components: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and lipoamide dehydrogenase (E3). The E1 enzyme is a heterotetramer of two alpha and two beta subunits. This gene encodes the E1 alpha 1 subunit containing the E1 active site, and plays a key role in the function of the PDH complex. Mutations in this gene are associated with pyruvate dehydrogenase E1-alpha deficiency and X-linked Leigh syndrome. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Research Area

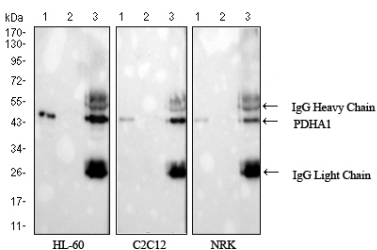
Image Data



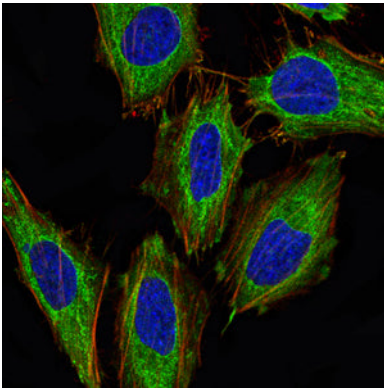
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



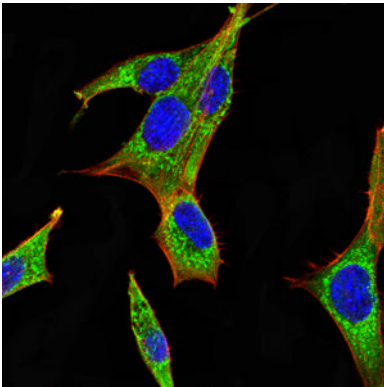
Western blot analysis using PDHA1 mouse mAb against HepG2 (1), HEK293 (2), HL-60 (3), SK-OV-3 (4), PC-3 (5), PANC-1 (6), NRK (7), C2C12 (8), C6 (9) and PC-12 (10) cell lysate.



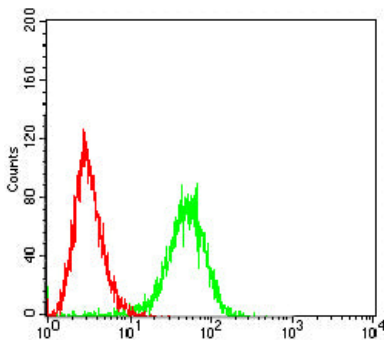
Immunoprecipitation using PDHA1 mouse mAb(dilution: 1/250) against HL-60, C2C12, and NRK cell lysate. Western blot analysis using PDHA1 mouse mAb, anti-mouse IgG was used as secondary antibody. Lane 1: cell lysate, Lane 2: Normal Mouse IgG instead of PDHA1 mouse mAb IP in cell lysate, Lane 3: PDHA1 mouse mAb IP in cell lysate.



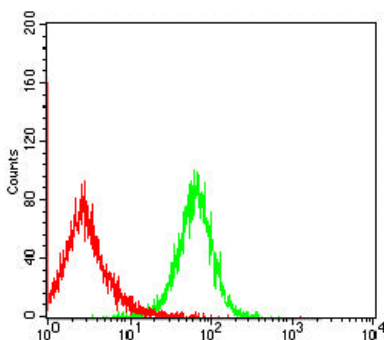
Immunofluorescence analysis of HeLa cells using PDHA1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



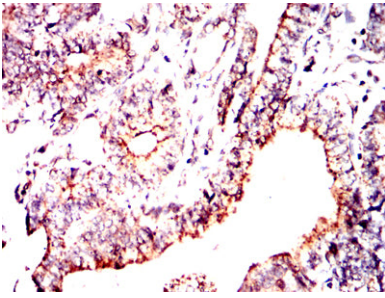
Immunofluorescence analysis of NIH/3T3 cells using PDHA1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



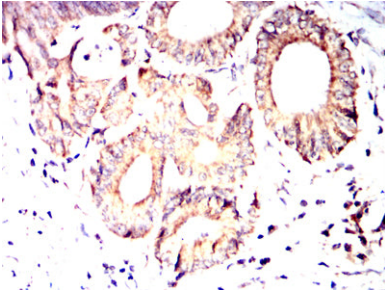
Flow cytometric analysis of HeLa cells using PDHA1 mouse mAb (green) and negative control (red).



Flow cytometric analysis of Jurkat cells using PDHA1 mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissues using PDHA1 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissues using PDHA1 mouse mAb with DAB staining.