

# PDHA1 Monoclonal Antibody

### Description

Product type	Antibody
Code	BT-MCA4517
Host	Mouse
Isotype	Mouse IgG1
Size	100μL, 50μL
Immunogen	Purified recombinant fragment of human PDHA1(AA: 241-390) expressed in E. Coli.
Mol wt	43 kDa
Species reactivity	Human,Mouse,Rat
Clonality	Monoclonal
Recommended application	WB,IP,IHC,ICC,FCM
Concentration	N/A
Full name	N/A
Synonyms	PDHA;PDHAD;PHE1A;PDHCE1A
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This product is for research use only, not for use in human, therapeutic or diagnostic procedure.

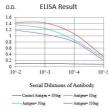
## Background

The pyruvate dehydrogenase (PDH) complex is a nuclear-encoded mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO(2), 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.

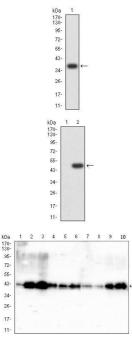
#### **Recommended Dilution**

WB: 1:500 - 1:2000 IHC-p: 1:200 - 1:1000 ICC: 1:50 - 1:200 FCM: 1:200 - 1:400 ELISA: 1:10000 Not yet tested in other applications.

Images



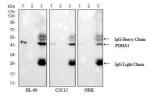
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

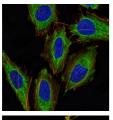


Western blot analysis using PDHA1 mAb against human PDHA1 (AA: 241-390) recombinant protein. (Expected MW is 37.5 kDa)

Western blot analysis using PDHA1 mAb against HEK293-6e (1) and PDHA1 (AA: 241-390)hIgGFc transfected HEK293-6e (2) cell lysate.

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.



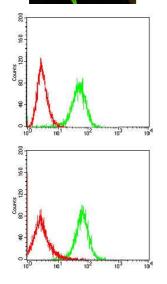


Immunoprecipitation using PDHA1 mouse mAb(dilution: 1/250) against HL-60, C2C12, and NRK cell lysate. Western blot analysis using PDHA1 mouse mAb, anti-mouse IgG was used as secondary antibody. Lane 1: cell lysate, Lane 2: Normal Mouse IgG instead of PDHA1 mouse mAb IP in cell lysate, Lane 3: PDHA1 mouse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

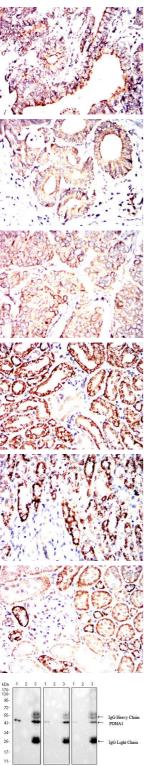
Immunofluorescence analysis of Hela cells using PDHA1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

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. Secondary antibody from Fisher (Cat#: 35503)

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 lung cancer tissues using PDHA1 mouse mAb with DAB staining.

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

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

Immunohistochemical analysis of paraffin-embedded mouse kidney tissues using PDHA1 mouse mAb with DAB staining.

Immunohistochemical analysis of paraffin-embedded Rat kidney tissues using PDHA1 mouse mAb with DAB staining.

Immunohistochemical analysis of paraffin-embedded Rabbit kidney tissues using PDHA1 mouse mAb with DAB staining.

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 Immunoprecipitation using PD

 cell lysate.
 Western blot analys
 antibody. Lane 1: cell lysate, L
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 ig6 Lig6t Chain
 Lig6 Lig6t Chain
 lysate, Lane 3: PDHA1 mouse

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.

#### Storage

Store at 4°C short term. Aliquot and store at -20°C long term.

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