

## PDHA1 Monoclonal Antibody

### Description

<b>Product type</b>	Antibody
<b>Code</b>	BT-MCA3471
<b>Host</b>	Mouse
<b>Isotype</b>	Mouse IgG2a
<b>Size</b>	100µL, 50µL
<b>Immunogen</b>	Purified recombinant fragment of human PDHA1(AA: 241-390) expressed in E. Coli.
<b>Mol wt</b>	43 kDa
<b>Species reactivity</b>	Human,Mouse,Rat
<b>Clonality</b>	Monoclonal
<b>Recommended application</b>	WB,IHC,ICC,FCM
<b>Concentration</b>	N/A
<b>Full name</b>	N/A
<b>Synonyms</b>	PDHA;PDHAD;PHE1A;PDHCE1A

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<sub>2</sub>, 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

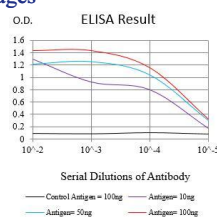
ICC: 1:50 - 1:200

FCM: 1:200 - 1:400

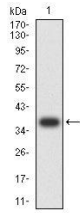
ELISA: 1:10000

Not yet tested in other applications.

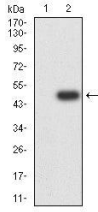
### Images



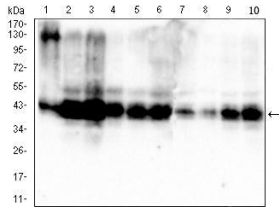
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



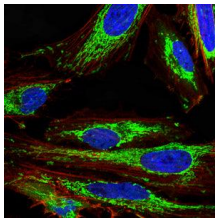
Western blot analysis using PDHA1 mAb against human PDHA1 (AA: 241-390) recombinant protein. (Expected MW is 37.5 kDa)



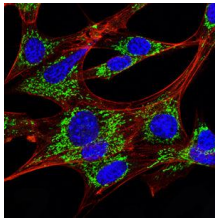
Western blot analysis using PDHA1 mAb against HEK293-6e (1) and PDHA1 (AA:241-390)-hlgGFc transfected HEK293-6e (2) cell lysate.



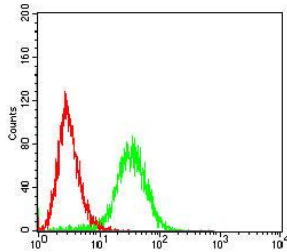
Western blot analysis using PDHA1 mouse mAb against HepG2 (1), Hek293 (2), HL-60 (3), SK-OV-3 (4), PC-3 (5), PANC-1 (6), NRK (7), C2C12 (8), C6 (9), and PC-12 (10) cell lysate.



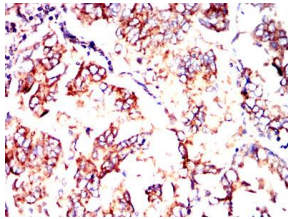
Immunofluorescence analysis of HeLa cells using PDHA1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)



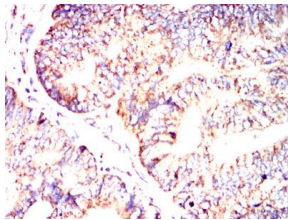
Immunofluorescence analysis of NIH/3T3 cells using PDHA1 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)



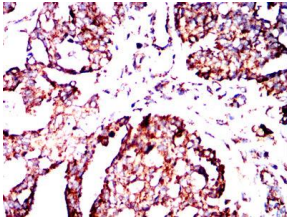
Flow cytometric analysis of HeLa cells using PDHA1 mouse mAb (green) and negative control (red).



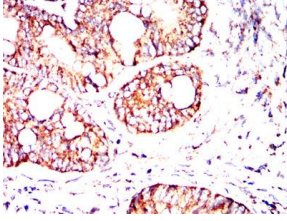
Immunohistochemical analysis of paraffin-embedded lung cancer tissues using PDHA1 mouse mAb with DAB staining.



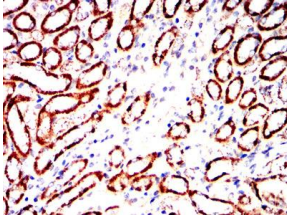
Immunohistochemical analysis of paraffin-embedded colon cancer tissues using PDHA1 mouse mAb with DAB staining.



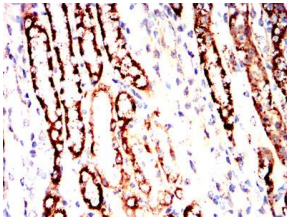
Immunohistochemical analysis of paraffin-embedded breast cancer tissues using PDHA1 mouse mAb with DAB staining.



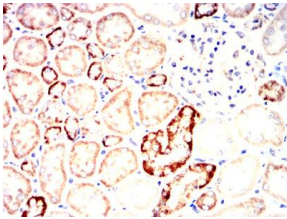
Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using PDHA1 mouse mAb with DAB staining.



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.

### Storage

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

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