DATASHEET

PDHA1 Mouse Monoclonal Antibody(C2898)

CAT. NO. AMA02510

KEY FEATURES

Target	PDHA1	Source / Host	Mouse
Reactivity	Human, Mouse, Rat	Clonality	Monoclonal
Applications	WB, IHC, IF/ICC, IP, FC	Conjugation	Unconjugated
Form / Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.	Storage	at-20°C

BACKGROUND

Together with PDHB forms the heterotetrameric E1 subunit of the pyruvate dehydrogenase (PDH) complex complex . The PDH complex catalyzes the overall conversion of pyruvate to acetyl-CoA and CO(2), and thereby links cytoplasmic glycolysis and the mitochondrial tricarboxylic acid (TCA) cycle . It contains multiple copies of three enzymatic components: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and dihydrolipoamide dehydrogenase (E3) (Probable). The E1 subunit catalyzes both the thiamine pyrophosphate (TPP)-dependent decarboxylation of pyruvate and the reductive acetylation of a lipoyl group covalently linked to the lipoyl-bearing domains of E2 .

APPLICATION

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:1000
IHC	1:100 - 1:500
IF/ICC	1:50 - 1:100
FC	1:100 - 1:200

*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

PRODUCT OVERVIEW

Description	Mouse monoclonal to PDHA1
Specificity	Recognizes endogenous levels of PDHA1 protein
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human PDHA1 expressed in E. Coli
Purification	This antibody is purified through a protein G column.
Molecular Weight	Predicted: 43 kD; Observed: 43 kD kD
Form/Buffer	Mouse IgG1. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative Names	PHE1A; Pyruvate dehydrogenase E1 component subunit alpha, somatIC, form, mitochondrial; PDHE1-A type I
Gene Symbol	PDHA1
Entrez Gene	5160(Human); 18597(Mouse)
SwissProt	P08559(Human); P35486(Mouse); P26284(Rat)

*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact info@arexbio.com or your local distributor.

*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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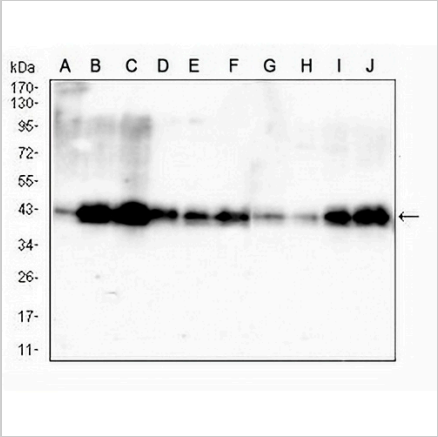
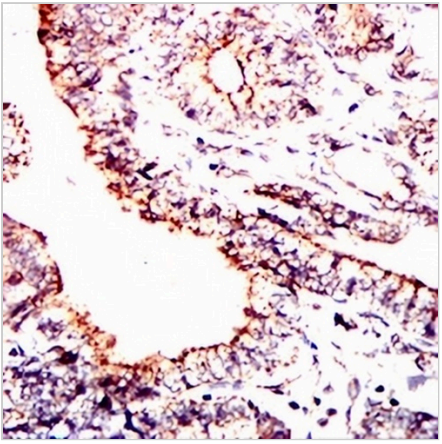
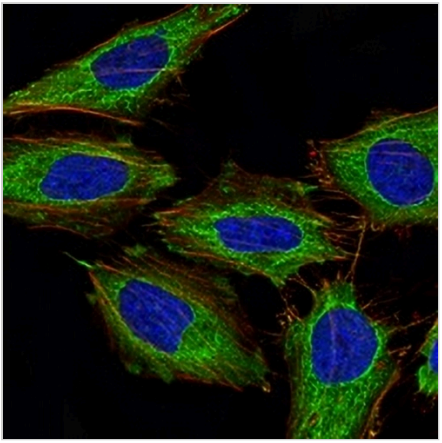
DATA



Western blot analysis of PDHA1 expression in HepG2 (A), HEK293 (B), HL60 (C), SKOV3 (D), PC3 (E), PANC1 (F), NRK (G), C2C12 (H), C6 (I), PC12 (J) whole cell lysates. (Predicted band size: 43 kD; Observed band size: 43 kD kD)



Immunohistochemical analysis of PDHA1 staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PDHA1 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AREX® Fluor 488 -conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AREX® Fluor 594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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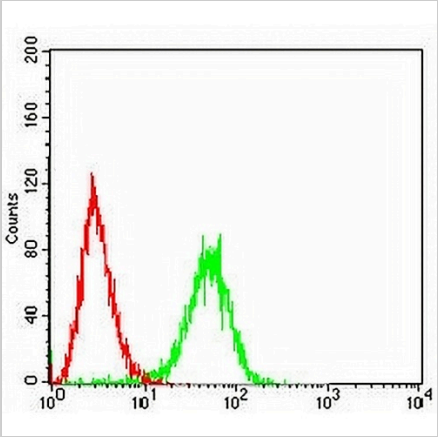
DATA (CONTINUED)



Flow cytometric analysis of HeLa cells using Anti-PDHA1 Antibody (green) and negative control (red).

STORAGE

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

NOTE

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.