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Product datasheet for TA502704

PDHA1 Mouse Monoclonal Antibody [Clone ID: OTI2B10]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2B10
Applications:	FC, IF, WB
Recommend Dilution:	WB 1:2000, IF 1:100, FLOW 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human PDHA1 (NP_000275) produced in HEK293T cell.
Formulation:	PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Predicted Protein Size:	40.2 kDa
Gene Name:	pyruvate dehydrogenase E1 alpha 1 subunit
Database Link:	NP_000275 Entrez Gene 5160 Human
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.
Synonyms:	PDHA; PDHAD; PDHCE1A; PHE1A

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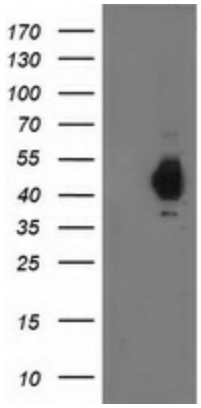
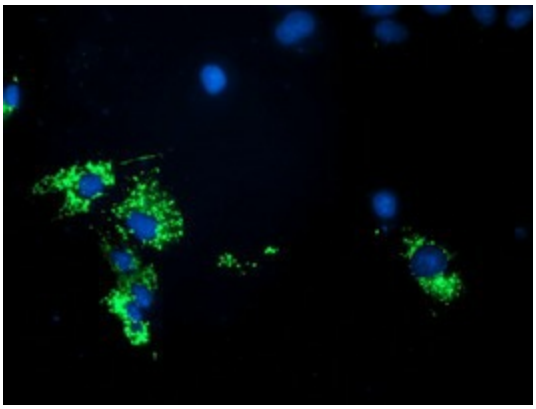
Protein Families: Druggable Genome

Protein Pathways: Butanoate metabolism, Citrate cycle (TCA cycle), Glycolysis / Gluconeogenesis, Metabolic pathways, Pyruvate metabolism, Valine, leucine and isoleucine biosynthesis

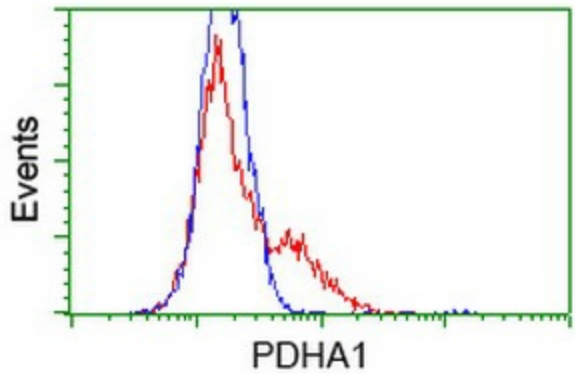
Product images:



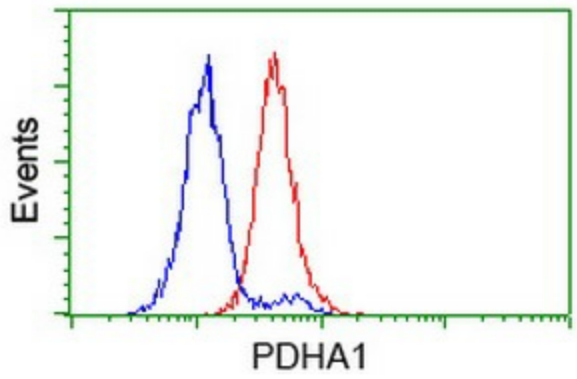
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY PDHA1 ([RC201831], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PDHA1. Positive lysates [LY400110] (100ug) and [LC400110] (20ug) can be purchased separately from OriGene.



Anti-PDHA1 mouse monoclonal antibody (TA502704) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY PDHA1 ([RC201831]).



HEK293T cells transfected with either [RC201831] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-PDHA1 antibody (TA502704), and then analyzed by flow cytometry.



Flow cytometric Analysis of Hela cells, using anti-PDHA1 antibody (TA502704), (Red), compared to a nonspecific negative control antibody ([TA50011]), (Blue).