

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for TA347015

PDHA1 Mouse Monoclonal Antibody [Clone ID: 3H2-F8-B5]

Product data:

Product Type: Primary Antibodies

Clone Name: 3H2-F8-B5

Applications: IF, WB

Recommend Dilution: WB: 1:1000, IF: 1:100

Reactivity: Human, Mouse

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: The immunogen for PDHA1 antibody: purified recombinant human Pyruvate Dehydrogenase

protein fragments expressed in E.coli.

Formulation: Purified mouse monoclonal in buffer containing 0.1M Tris-Glycine (pH 7.4, 150 mM NaCl) with

0.02% sodium azide, 50%, glycerol

Purification: Affinity purified

Predicted Protein Size: 43 kDa

Gene Name: pyruvate dehydrogenase (lipoamide) alpha 1

Database Link: NP 000275 Entrez Gene 18597 MouseEntrez 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

Protein Families: Druggable Genome

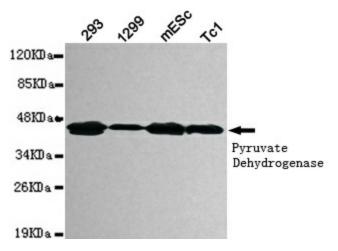




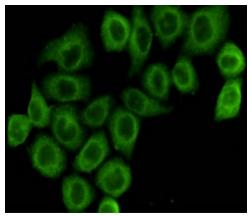
Protein Pathways:

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

Product images:



Western blot detection of pyruvate dehydrogenase (lipoamide) alpha 1 in 293, 1299, mEsc and Tc1 cell lysates using pyruvate dehydrogenase (lipoamide) alpha 1 mouse mAb (1:1000 diluted).Predicted band size: 43KDa.Observed band size: 43KDa.



Immunocytochemistry staining of HeLa cells fixed with 4% Paraformaldehyde and using antipyruvate dehydrogenase (lipoamide) alpha 1 mouse mAb (dilution 1:100).