

# Product datasheet for TP301831M

## PDHA1 (NM\_000284) Human Recombinant Protein

### **Product data:**

#### **Product Type: Recombinant Proteins Description:** Recombinant protein of human pyruvate dehydrogenase (lipoamide) alpha 1 (PDHA1), nuclear gene encoding mitochondrial protein, 100 µg Species: Human **Expression Host:** HEK293T **Expression cDNA** >RC201831 protein sequence Clone or AA Red=Cloning site Green=Tags(s) Sequence: MRKMLAAVSRVLSGASQKPASRVLVASRNFANDATFEIKKCDLHRLEEGPPVTTVLTREDGLKYYRMMQT VRRMELKADQLYKQKIIRGFCHLCDGQEACCVGLEAGINPTDHLITAYRAHGFTFTRGLSVREILAELTG RKGGCAKGKGGSMHMYAKNFYGGNGIVGAQVPLGAGIALACKYNGKDEVCLTLYGDGAANQGQIFEAYNM AALWKLPCIFICENNRYGMGTSVERAAASTDYYKRGDFIPGLRVDGMDILCVREATRFAAAYCRSGKGPI LMELQTYRYHGHSMSDPGVSYRTREEIQEVRSKSDPIMLLKDRMVNSNLASVEELKEIDVEVRKEIEDAA QFATADPEPPLEELGYHIYSSDPPFEVRGANQWIKFKSVS **TRTRPLEQKLISEEDLAANDILDYKDDDDKV** C-Myc/DDK Tag: Predicted MW: 40.2 kDa **Concentration:** >0.05 µg/µL as determined by microplate BCA method **Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining **Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol Recombinant protein was captured through anti-DDK affinity column followed by conventional **Preparation:** chromatography steps. Note: For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process. Store at -80°C. Storage: Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles. RefSeq: NP 000275



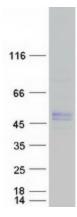
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### OriGene Technologies, Inc.

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|                  | PDHA1 (NM_000284) Human Recombinant Protein – TP301831M   |
|------------------|---|
| Locus ID:        | 5160  |
| UniProt ID:      | <u>P08559</u> , <u>A0A024RBX9</u>   |
| RefSeq Size:     | 3390  |
| Cytogenetics:    | Xp22.12   |
| RefSeq ORF:      | 1170  |
| Synonyms:        | PDHA; PDHAD; PDHCE1A; PHE1A   |
| Summary:         | 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.[provided by RefSeq, Mar 2010] |
| Protein Families | Druggable Genome  |
| Protein Pathway  | <b>s:</b> Butanoate metabolism, Citrate cycle (TCA cycle), Glycolysis / Gluconeogenesis, Metabolic pathways, Pyruvate metabolism, Valine, leucine and isoleucine biosynthesis   |

## **Product images:**



Coomassie blue staining of purified PDHA1 protein (Cat# [TP301831]). The protein was produced from HEK293T cells transfected with PDHA1 cDNA clone (Cat# [RC201831]) using MegaTran 2.0 (Cat# [TT210002]).

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