

Product datasheet for PH301831

OriGene Technologies, Inc.

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PDHA1 (NM_000284) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: PDHA1 MS Standard C13 and N15-labeled recombinant protein (NP_000275)

Species:HumanExpression Host:HEK293

Expression cDNA Clone

RC201831

or AA Sequence: Predicted MW:

43.3 kDa

Protein Sequence: >RC201831 protein sequence

Red=Cloning site Green=Tags(s)

MRKMLAAVSRVLSGASQKPASRVLVASRNFANDATFEIKKCDLHRLEEGPPVTTVLTREDGLKYYRMMQT VRRMELKADQLYKQKIIRGFCHLCDGQEACCVGLEAGINPTDHLITAYRAHGFTFTRGLSVREILAELTG RKGGCAKGKGGSMHMYAKNFYGGNGIVGAQVPLGAGIALACKYNGKDEVCLTLYGDGAANQGQIFEAYNM AALWKLPCIFICENNRYGMGTSVERAAASTDYYKRGDFIPGLRVDGMDILCVREATRFAAAYCRSGKGPI LMELQTYRYHGHSMSDPGVSYRTREEIQEVRSKSDPIMLLKDRMVNSNLASVEELKEIDVEVRKEIEDAA

QFATADPEPPLEELGYHIYSSDPPFEVRGANQWIKFKSVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration: >0.05 μg/μL as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 000275

RefSeq Size: 3390 RefSeq ORF: 1170

Synonyms: PDHA; PDHAD; PDHCE1A; PHE1A

Locus ID: 5160



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UniProt ID: <u>P08559</u>, <u>A0A024RBX9</u>

Cytogenetics: Xp22.12

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

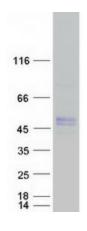
RefSeq, Mar 2010]

Protein Families: Druggable Genome

Protein Pathways: 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]).