

#### OriGene Technologies, Inc.

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# Product datasheet for TP301831

# PDHA1 (NM\_000284) Human Recombinant Protein

## **Product data:**

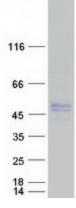
Product Type:	Recombinant Proteins
Description:	Recombinant protein of human pyruvate dehydrogenase (lipoamide) alpha 1 (PDHA1), nuclear gene encoding mitochondrial protein, 20 μg
Species:	Human
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>RC201831 protein sequence Red=Cloning site Green=Tags(s)
	MRKMLAAVSRVLSGASQKPASRVLVASRNFANDATFEIKKCDLHRLEEGPPVTTVLTREDGLKYYRMMQT VRRMELKADQLYKQKIIRGFCHLCDGQEACCVGLEAGINPTDHLITAYRAHGFTFTRGLSVREILAELTG RKGGCAKGKGGSMHMYAKNFYGGNGIVGAQVPLGAGIALACKYNGKDEVCLTLYGDGAANQGQIFEAY NM
	AALWKLPCIFICENNRYGMGTSVERAAASTDYYKRGDFIPGLRVDGMDILCVREATRFAAAYCRSGKGPI LMELQTYRYHGHSMSDPGVSYRTREEIQEVRSKSDPIMLLKDRMVNSNLASVEELKEIDVEVRKEIEDAA QFATADPEPPLEELGYHIYSSDPPFEVRGANQWIKFKSVS
	TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Predicted MW:	40.2 kDa
Concentration:	>0.05 $\mu$ g/ $\mu$ L 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
Preparation:	Recombinant protein was captured through anti-DDK affinity column followed by conventional 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.
Storage:	Store at -80°C.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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	PDHA1 (NM_000284) Human Recombinant Protein – TP301831
RefSeq:	<u>NP 000275</u>
Locus ID:	5160
UniProt ID:	<u>P08559</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 Pathways	: Butanoate metabolism, Citrate cycle (TCA cycle), Glycolysis / Gluconeogenesis, Metabolic pathways, Pyruvate metabolism, Valine, leucine and isoleucine biosynthesis
Product image	P2.

## **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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